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springs optional at matra cost 2 TON

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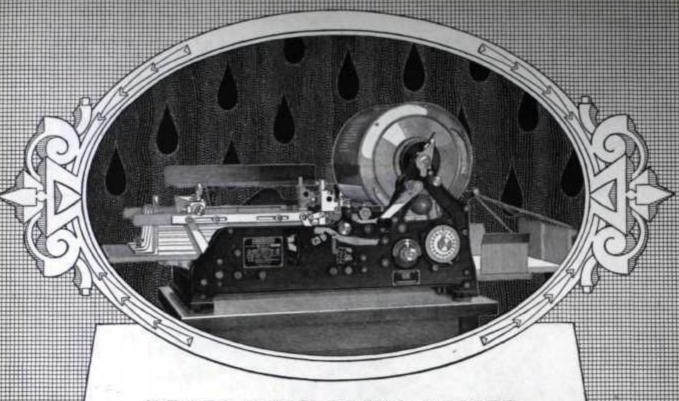
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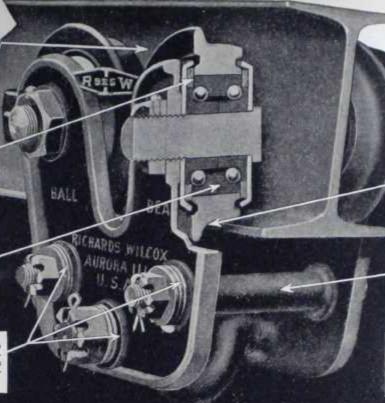


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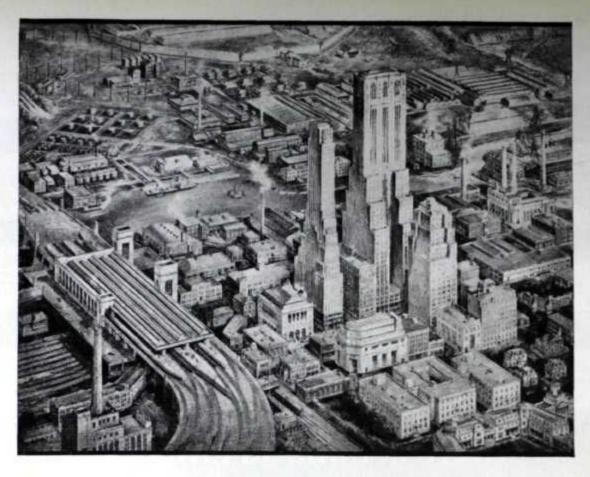
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MAXIMUM RETURN TO CLIENTS PER DOLLAR INVESTED

NATION'S BUSINESS for May



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Managing Editor, WARREN BIRROY Director of Advertising, Guy Schivner



Business Manager, J. B. Wyckopp Circulation Manager, Lawrence F. Hunley

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Through the EDITOR'S SPECS

Behind the Muscle Shoals fight lie two conceptions of the American Government—the President's view that it is simply a referee to see that the rules of a contest among its citizens are observed, and the contrasted belief that it is, and increasingly is to be, an agency of public service.

-THE NATION

HEN The Nation talks of the Government as an "agency of public service" it is, of course, merely saying—in what it believes to be a more effective way—"put the Government into competitive business."

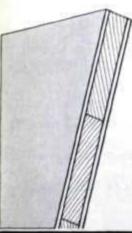
That is what the Muscle Shoals bill was aimed at and that is increasingly the aim of the so-called progressives' planning.

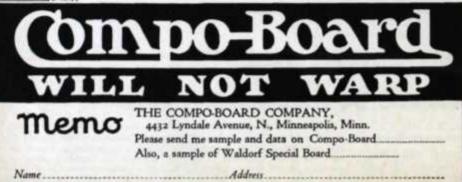
Even if we accepted this phrasing that the choice was between the Government as a referee and the Government as an agency of public service we should align ourselves with those who believe that it is better to limit the powers of government to the functions of law enforcement and protection of life and property, than to have it further invade private business and private life. . . .

MUCH of this issue of Nation's Busi-NESS is devoted to consideration of this problem.

Few men who are not in constant daily touch with the Government at Washington have an adequate conception of the extent to which branches of the Government devote their efforts not merely to self-perpetuation but to self-increase.

A weapon widely used is propaganda and publicity, although there are legislative restrictions on press agents for government purposes. An anonymous writer, anonymous because he is a little bit fearful of the petty tyranny of government bureaus, tells in the article called "The Lobby We All Support" a





WANTED: SAFE MEN for Dangerous Times

Business today needs, and needs desperately, executives with fresh minds and up-to-date equipment—men who are safe, not in the discarded sense of dodging decisions, but in the modern sense of making them and making them right.

During the next five very dangerous and exciting years, the new competition will make the fortunes of a lot of such men—and incidentally toss a lot of others on the scrap pile.

We are not in the least exaggerating this demand for trained executives. So badly are they needed that the key men of American business today have gone to extraordinary lengths in helping the Institute to train such executives. They have actually prepared for us a whole new Course, designed to meet the new conditions.

The authors of this new Course are men whose success belongs to the present—not the past. Their own success in the future depends in some degree upon their ability to find and develop capable assistants. That is why they have cooperated so enthusiastically with the Institute. Among them are:

Alfred P. Sloan, Jr., President, General Motors Corp.; Hon. Will H. Hays, President, Motion Picture Producers and Distributors of America, formerly U. S. Postmaster General; Bruce Barton, Chairman of the Board, Batten, Barton, Durstine & Osborn, Inc.; John T. Madden, Dean, School of Commerce, Accounts and Finance, New York University; Dr. Julius Klein, The Assistant Secretary, U. S. Department of Commerce; Hubert T. Parson, President, F. W. Woolworth Company; David Sarnoff, President, Radio Corporation of America; Dexter S. Kimball, Dean, College of Engineering, Cornell University; M. H. Aylesworth, President, National Broadcasting Company; Frederick W. Pickard, Vice-President, E. I. du Pont de Nemours & Com-



pany, Inc.; Frederick H. Ecker, President, Metropolitan Life Insurance Company; and General Samuel McRoberts, Chairman of the Board, Chatham Phenix National Bank and Trust Company.

In preparing the new Course and Service we have drawn, without regard to cost, on the time and interest of these outstanding business statesmen. It is new, challenging, utterly un-academic, vibrant with the energy of men whose names are magic in the councils of modern business. So new is it that the latter sections are not yet off the presses, although the work of assembling and editing is now complete.

We have prepared a new booklet which describes this new Course and Service. It is entitled "What an Executive Should Know." It is for men of serious purpose only. It will take about an hour to read, and it is free. Frankly, it is difficult for us to understand how any man who intends to make himself independent in the next five years can afford not to read it.

You must equip yourself to deal with what lies ahead. Send for your copy of this booklet today. It will come to you by mail, without obligation.

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THE brake-service man who uses anything but the best brake lining is only half a man as far as you are concerned.

It takes him just as long to put on an inferior lining as it would to put on the best. But if the inferior lining lasts only half as long—as is frequently the case—you get only half as much benefit out of his labor as you might get.

In other words, he is only half a workman, drawing a whole man's pay.

Labor is an important item in any brake relining job. In many cases it represents more than half the total cost. Make sure that the labor you pay for is not wasted on inferior linings.

The largest bus and truck operators, to whom braking efficiency and economy are most important, use Ferodo Linings even though these linings cost them a little more per foot. They wouldn't buy these linings if it didn't pay. Moreover, a careful survey indicates that Ferodo Linings are the fastest growing linings in point of sales. There must be a reason for that, also.

May we therefore suggest that the next time your brakes need relining, you go to a Ferodo Service Station?

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Factory and General Offices: New Brunswick, New Jersey



graphic story of how government agencies promote themselves.

IN NO way does the hand of government reach out more directly to touch upon business than through the agency of the Sherman and Clayton antitrust laws. There is the constant ferment in business over them, a constant urging that they be repealed, modified, strengthened or a dozen other things done to them.

At a meeting last fall of the American Academy of Political Science the greatest applause to any speaker went to Thomas P. Lamont, of J. P. Morgan and Company, when he suggested that after 40 years it was time to look at these laws again.

No man could approach them with a better background than Silas H. Strawn, who raises the question of their reform in an article called "Are Our Antitrust Laws Out of Date?" Mr. Strawn is chairman of the board of Montgomery, Ward & Company, director of many important corporations and a member of one of Chicago's leading law firms. He knows business from the standpoint of the lawyer, and law from the standpoint of the business man. Mr. Strawn has been described as the busiest man in the United States, but never too busy to take another job. He was able to serve the Government as a delegate to the conference on Chinese customs tariff and he found time to be president of the United States Golf Association.

THE Government's power to tax is not merely a power to raise money. It is a power to make or break an industry. Half of our regulatory bills take the form of taxation. Half our projects to encourage one type of business and discourage another are to be accomplished by increasing or reducing the rate of taxation in proportion to the size of the business. In New York and other states there are bills for sales taxes.

Another lawyer-trained business man, Samuel W. Reyburn, head of Lord and Taylor in New York, presents the case of the large retailer against what he believes to be an unfair sales tax in the article, "Throwing Light on the Sales Tax."

WHEN the automobile first came into wide use, many people predicted the passing of the street car. It is still with us, however, and is likely to remain. The street car and bus give the urban community a form of transportation

which nothing else can duplicateand which is needed. But can public transportation meet the increasing competition of the private automobilethat is, can it meet this competition as a private enterprise and show a profit?

Or must the street-car lines be taken over as a government "service" and operated at a loss? John H. Hanna, president of the American Electric Railway Association, has some sane ideas on the subject. In "Car Lines Face a Changing World" he points out why it should not be necessary for the taxpayer to foot another bill.

BUT underlying all these topics of government regulation is the one subject which we summarized at the beginning of this column. Are we as a country to do things by government or to do things by ourselves? Shall we build up a country of mental robots each fitting into his allotted niche in government, each drawing his wage from government, doing the least that he can for the most he can get from government, or are we to go ahead as we have in the past, a country where each man has a chance and where constantly that individual striving has raised the level of comfort for all of us?

John Spargo began his public life as a devoted socialist and a leader in that party. Time and thought and experience have swung him around to a sincere belief that it is only by individualism that we can climb. That is the inspiring theme of the article, "American Individualism Triumphant."

HENRY FORD has called the present age the age of power. All about us we see this view exemplified. A suction sweeper and a power washer come into the home and drudgery departs. A steam shovel does the work of a battalion of men with picks and shovels. An electric hoist frees a legion of hodcarriers for other less tedious jobs.

Without power, this age could not exist. Imagine the cost of an automobile or a radio if each separate piece was tapped out by hand. Imagine the effect on the market for books, magazines and newspapers if homes were lighted only by oil lamps. Imagine the effect on real estate prices if there were no elevators, or transportation companies.

Our cover artist, Eugen Weisz, has given us a symbol of this power agethe hand on the master switch. In his painting he depicts, not only the vastness of our power resources, but the new dignity of labor. Let the unseen

(Continued on page 159)

THE SERVICE RENDER

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As a part of our service to investors, we have just prepared a special letter which emphasizes the unusual promise of 1931 as a time for the far-seeing, conservative, long-pull investor to accumulate, at present low prices, sound, dividendpaying common stock. Lists of about fifty typical issues are classified. This special letter will gladly be mailed on request.

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"... Experts are almost uniformly of the opinion that this invention is destined to revolutionize the industry,"— News Item

most affected. • A new discovery, a new invention, or the application of a new principle in the processes of an industry may suddenly lay a heavy tax upon the management and financial resources of many companies. They may mean expensive replacements—the scrapping of comparatively new equipment. When situations of this kind arise, the most capable managements may be seriously hampered unless adequate liquid financial reserves are available for the emergency. • Nowhere are the changes and adjustments incident to progress so much a factor to be reckoned with as in the United States. It is not surprising, therefore, that more and more companies - small as well as large - are coming to recognize the importance of a strong investment reserve, designed to act as a buffer against changes and developments which may call for the readjustments of progress. • During 1930, more bonds were bought for business reserve purposes than during any similar preceding period, if the experience of our organization can be taken as a guide. This experience is at the disposal of others interested in working out reserve structures that fit their individual requirements. A copy of our booklet, Business Reserves, will be sent without obligation to any executive requesting it on his business letterhead.

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NATION'S BUSINESS



A MAGAZINE FOR BUSINESS MEN



Democracy on Trial"

OLITICKING-1932 model-has begun. And now is the time for all good men to resolve to cast a small round eye at each economic diagnosis and prescription dur-

ing the coming political year.

Already a group of reformers, radicals and idealists, at a love feast in Washington, declares democracy on trial and plans "mobilization of public opinion behind a program of legislation based on fundamental principles rather than political consideration." How typically resounding!

If democracy be on trial, it is because of such proposals to make government "a great social agency," repudiating a 140-year policy that government should only referee the competitive contests of its citizens. More and more legislation, more and more functions with more and more men and women added to an already ponderous machine—this is democracy's real danger.

Already we have wandered far from our earlier idea of the function of government: the duty of protecting us from violence and invasion, of establishing justice, of erecting and maintaining certain public works and institutions.

Individualism took deep root in America from the very first. It is not surprising. The colonists sought a new deal from life. They desired free play of initiative, freedom of contract. They clearly saw central government as a policeman only, who should never interfere except to protect property and life.

How is it, then, that we have come to lean so heavily on government? Why is our every altruistic emotion capitalized by bureaucracy? How is it that the very milk of human kindness

becomes the pap of paternalism?

Answer: The persistence of our social theorists. They profess to see government "a kind of terrestrial providence whose duty would be to remedy every ill that flesh is heir to." Their schemes to put the government into every activity are legion. They are agitated by eloquent pleaders—an eloquence that lulls the American people into the belief that power to legislate signifies an adequate capacity for management.

Congress at its last session appropriated some five billion dollars for government usethe greatest peacetime expenditure on record. Those who believe that legislators have the Midas touch will not bother to ponder the prospective deficit of 500 millions. Eventually that item will work its way into the cost of things.

The more government is changed, the more it remains the same thing-only more so. We express general relief at the avoidance of an extra session of the Congress, yet at the same time are gullible enough to endorse a larger measure of legislation for the next Congress.

"Abject dependence upon government," said President Eliot, of Harvard, "is an accursed inheritance from the days of the divine right of kings." It has also invited comment that "it is the accursed prescription of a communistic order." The thoughtful observe that the divine right of kings survives in the Russian idea that fixes a man's production and restricts his consumption of food, shelter, and the clothes he wears.

The trouble is that so many political projectors mistake change for progress. They take wing upon the winds of doctrine and soar blithely in the ether of plausibility, untroubled by workaday practicalities. When so seasoned a liberal as Walter Lippmann admits bewilderment, it is small wonder that the lay observer of our political currents should be confused by the welter of panaceas, most of which provide for the government to do something.

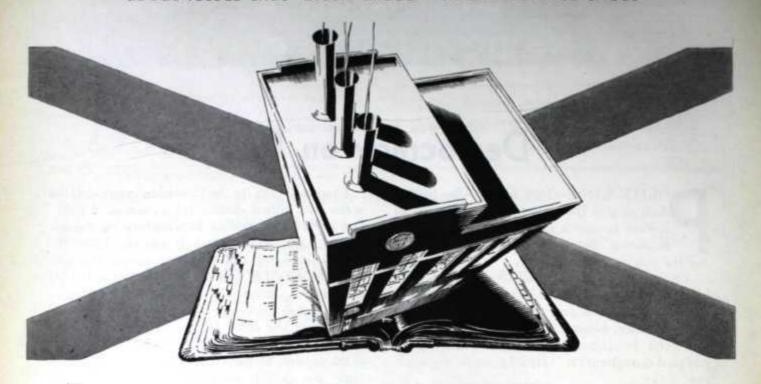
We are already law-ridden. We waste billions of hard-earned money on political experiments and expedients. It is time to declare a moratorium. It is time to return to the golden days when we did things for ourselves, when we mistrusted the mumbo-jumbo of short cuts by legislation.

Democracy is indeed on trial. A Chinese proverb has it that 'When a nation makes many laws it has begun to die."

Merce Thorpe

A NEW SLANT ON POWER!

about losses that "blush unseen" in the balance sheet



- P How about your steam plant? Always have plenty of power? Probably you've never had to shut down because the steam plant failed. And that may be the reason why you have never had your power facilities thoroughly "dollar" diagnosed.
- The cost of steam or power used in the manufacture of your product may be a fraction of a cent . . . insignificant. Often in reducing the cost of a single product it doesn't count, yet at the end of a year's operation, power losses that "blush unseen" in the balance sheet aggregate thousands of dollars . . . in the red instead of in the profit column.
- % It's safe to say that you haven't overlooked many opportunities to cut the cost of your product... yet power—a definite part of your overhead—has not contributed its share to profits.
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NATION'S BUSINESS

Published at Washington by the Chamber of Commerce of the United States

MERLE THORPE, Editor

MAY, 1931

VOL. XIX No. 5

As the Business World Wags

THUS WE MAY SEE, QUOTH HE, HOW THE WORLD WAGS—As You Like It.

Calls a Halt *

IN DECLARING that it will not The Farm Board "cause the Grain Stabilization Corporation to make stabilization purchases from the 1931 crop," the Farm Board said:

"The Corporation . . . cannot follow a regular policy of buying at prices above the market, paying heavy storage charges and selling below cost."

Any keeper of a crossroads general store could have told the Farm Board that and it needn't have spent hundreds of millions of dollars to find it out.

As Chairman Legge went from the Farm Board back to the International Harvester Company which he had so skilfully managed, the Bulletin of the National City Bank waved him this farewell:

"The farmers are helping themselves by reducing their costs, and we suspect that Mr. Alexander Legge, after two years of honest and strenuous efforts to improve agricultural conditions by means of the machinery provided by Congress, is fairly well convinced that he can do more for the cause in his old implement business."

New Cures New Hopes THE difficulty of the wheat grower is not to be settled by government efforts to support the market or by exhortation to reduce acreage. Soon after the change in Farm

Board policy was announced there was drum beating by the Department of Agriculture over a reduction of acreage in Spring wheat but Spring wheat is only a third or so of the total wheat crop and Winter wheat acreage is but slightly reduced.

We shall hear, in fact we have already heard, cries for other methods of relief-equalization and export debenture. Perhaps we shall never be happy until we've

tried them all and the sooner we're over them the better -as mothers used to think about some diseases of children.

But as a Senator, long noted for his interest in farm relief, said:

"I'd be more eager for new legislation if I could see some place in the world where it was possible to sell our wheat. Those that need it to eat can't pay for it and those that can pay for it, don't need it."

Equalization and Debenture

WHAT do we mean by the debenture and equalization plans of saving the farmer?

The debenture plan is an export bounty. Designed to help the price

of agricultural commodities which are already protected by tariff, it means that a certificate would be issued, when wheat is exported, equal to half the import duty on the same commodity. This paper could in turn be used as payment of import duties. Since individual farmers or grain exporters are not often importers, some outside agency would have to trade in the certificates.

The equalization fee plan is more complicated. It is designed to make the tariff effective: for example, in the case of wheat, to make the domestic price 42 cents a bushel (the amount of the tariff) higher than the world price. To do this all wheat above domestic needs would be sold abroad, through an arrangement with exporting firms, at world prices.

These firms, buying the wheat at domestic prices and selling it at world prices, would incur a loss, of course. They would be reimbursed through funds collected, ultimately, from American wheat growers in the form of this equalization fee. This fee would be collected on every bushel of the crop sold, whether at home or abroad. Since the loss was sustained only on that portion of the crop sold abroad, the fee on the individual unit would need to be only a fraction of the import duty. Thus if 600 million bushels of wheat go to market, and our domestic needs are only 400 million bushels, 200 million bushels would be sold abroad. The loss on this, at 42 cents a bushel, would be 84 million dollars. This loss would be made up by prorating it over the entire 600 million bushels marketed, resulting in a 14-cent assessment, or equalization fee, against each of the 600 million bushels. Thus though the farmer loses the 14 cents on each bushel, he gains 28 cents, the difference between the fee and the 42-cent tariff which the fee plan has made effective.

Some Bonus Pros and Cons

IS IT right to reward management in proportion to profits? Is a "bonus" a fair way to pay the hired men of a corporation whether they are hired to sit behind desks and

use their heads or stand before machines and use both heads and muscles?

Not many would say "no" to that question, yet the whole topic of bonus is one much discussed by business. In Bethlehem Steel, President E. G. Grace got \$1,600,000 in 1929 and \$1,000,000 in 1930 in addition to his salary of \$12,000 and stockholders are going to court over it.

Someone has figured out that George W. Hill, president of American Tobacco, will get more than \$2,000,000 as his reward for 1930 from profit sharing and stock subscription privileges. "But," says someone, "didn't Lucky Strike, an American Tobacco product, make sensational advances in sales following advertising that caused wide discussion? And hasn't Mr. Hill set a new pace for tobacco manufacture and selling?"

American Woolen's stockholders have approved a bonus plan by which its president gets after the first \$2,000,000 net profits, 4 per cent on the next million, 5 per cent on the second million and 6 per cent on all over that. Other officers share similarly.

The objection is not to a bonus as a means of payment for management. It is the feeling that sometimes capital is making too great a sacrifice to management. In these lean years a million seems a lot to a stockholder whose dividend is threatened.

A Place for Bonuses

WE respectfully suggest to the Congress of the United States that a good test of the bonus system might be made in paying cabinet officers in proportion to what they

don't spend in their departments.

Obviously \$15,000 a year is not a fit salary for a man of cabinet rank, a man who is on the executive committee of a four billion dollar business, who sits in control over millions of money and thousands of men.

But think how much more adequately we might reward Secretary Hyde if we gave him part of what he could save in the Department of Agriculture. The estimates of appropriations for the Department of Agriculture for the year ending June 30, 1932 were \$225,000,000. Couldn't the Secretary lop off a million or two without giving up a single activity if he were sure that half of it or even 5 per cent of it were coming to him? And if he in turn should share the savings among division chiefs and bureau chiefs what an untying of red tape that would be!

Trespassing on States Rights



THE first important decision of the new Federal Power Commission forbids the Appalachian Electric Power Company to "proceed with construction (of a dam and reser-

voir on the New River in Virginia) until it shall have received and accepted" a standard form license under the Federal Water Power Act of 1920.

The decision is based ostensibly on the possibility that interstate commerce might be affected on the Kanawha River—150 miles below—of which the New River is a tributary, and in turn, on the Ohio River, the lower Mississippi, and maybe the Gulf of Mexico.

Because federal permission is required to protect navigable water, the federal agency involved may also impose on the permittee a long list of other obligations, the control of which inherently rests with the states themselves.

In its recent referendum on Water Power Policies, the membership of the National Chamber was practically unanimous in its assertion that

the Federal Government should leave to the states all possible control over the utilization of water resources within the states.

The states most intimately involved in the New River development are in accord with the power company. The principal supporters of federal supervision are Gifford Pinchot, and Judson I. King of the National Popular Government League, a public-ownership organization.

Who are the true representatives of the people—the elected governors of the five states directly concerned or Gifford Pinchot and the National Popular Government League?

The question of the New River development should go and will go to the Federal Courts for a final decision.

Two Views on Surpluses



A BANKER in New England, home of caution and Calvin Coolidge, is urging that corporation surpluses be reduced by payments to stockholders in extra cash dividends

and to workers through the maintenance of employment and wage rates. The banker, Bertram O. Moody, vice president of the First National Bank of Amherst, Massachusetts, expounds his ideas in the February issue of the American Bankers' Association Journal under the title, "A Billion Idle Dollars."

Mr. Moody supports his thesis by presenting the figures of twenty leading American corporations which on December 31, 1929 had cash and securities plus accounts receivable of \$2,200,000,000 against current liabilities of \$815,000,000.

He makes a more striking picture when he tabulates the statements of six leading Connecticut corporations on the same date. They had cash and securities plus accounts receivable of \$38,600,000 with current liabilities of \$7,150,000. (Mr. Moody's figures, if they were of December 31, 1930, might be less impressive.)

Spending other men's money for them is always agreeable and Roy Dickinson, clever supporter of the cause of advertising, explains in *Printers' Ink* how admirable and how much for the good of industry in general and industries in particular if a billion or so of surplus should be put into long-term advertising campaigns. No doubt, Ernest F. Du Brul, general manager of the Machine Tool Builders could prove convincingly that a wise expenditure of surplus would be in replacing obsolescent machinery and half a dozen builders would like a chance to show how intelligent it would be to put a billion or so into up-to-date factories.

Easy Money and Cheap Money

HEAVY borrowing at low interest rates by the federal and city government and by railroads featured the financial news recently.

Which means perhaps that money

is cheap but doesn't mean that it is easy.

"We are apt," said a banker, "to confuse in our thinking cheap money with easy money. Just now perhaps
money may be called cheap but it doesn't follow that it
is easy. Lenders are very cautious. On the other hand in
the days before the stock market collapse of late 1929,
money was by no means cheap but it seemed very easy.
The more it cost the more there seemed to be of it."

A suggestion which applies forcibly to the article by Fred W. Shibley on page 27 in which he discusses the difficulties many corporations will face in building up anew their working capital depleted by the depression.

Real Relief by the Railroads NOW that the words "drought relief" have about ceased to appear in the news, it may perhaps be well to bear in mind that among the most effective relief given to farmers by

any agency was that extended by the railroads which bore a heavy share of the burden voluntarily.

More than 65,000 cars of livestock feed were carried by the roads at rate reductions ranging from fifty per



One Overhead Expense a Business Can't Control

OUR cartoonist drew this picture after reading the New York Times of March 12. From one of the news pages near the front he learned that the New York Central Railroad was the largest taxpayer in New York City, having turned in more than \$9,000,000 in 1930. On another page he read that the dividend on that railroad's stock had been cut from \$8 to \$6 a share.

That one railroad paid to all governments, federal, state and local, more than \$35,000,000 in taxes in 1930. Readers know that 1930 was not a good year for railroads. One and all including the Central cut expenses but they couldn't control taxes. We just said that the railroad paid these taxes. It didn't. They were paid by more than 50,000 stockholders, by workers—white-collared or overalled whose wages are affected—by institutions who own the stock, by shippers and travelers who use the road.

That's one thing never to forget about taxes. The first payment into the government treasury is only a beginning. Every business that pays taxes is a tax collector and it collects from every stockholder and every user of its goods. cent east of the Mississippi to thirty per cent west. No record of the distances hauled is available. The railroads themselves made no effort to compute the losses they took to aid shippers and farmers; they merely dismissed the subject with the terse comment that the reductions totaled "several millions." Not the least admirable feature of the aid given by the carriers was the speed with which it was extended. A number of farm agencies expressed appreciation through resolutions.

It was simply a matter of extending aid to old customers sorely tried by events which could not be foreseen or controlled. The roads undertook this form of relief with no thought of exploitation or publicity.

Gratitude to Congress



CONGRESS has adjourned and there is no likelihood of an extra session. For this action, negative though it be, business gives thanks. Business, often critical of Congress,

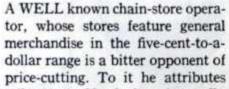
might well be thankful for other negative action by the country's major legislative body.

There were introduced in the 71st Congress, just ended, some 24,000 bills and only 1,300, or 5.4 per cent, were passed. The 70th Congress covering the last half of Mr. Coolidge's term passed 1,722 bills or seven per cent.

And for one more negative action let business be thankful. Congress did not pass over the President's veto the Muscle Shoals bill which would have put the Government into the power business. The country will have time to consider the straight, simple recommendation approved by American business through a referendum of the National Chamber that:

The Muscle Shoals project should be sold, or leased, as is, on the best possible terms.

Two Phases of Price-cutting



most of the ills of distribution and he deplores it equally on the part of chain or independent.

The same executive has his buyers scouting for new merchandise constantly. Countless items of merchandise are examined and analyzed by his staff from day to day. A hair brush selling for two dollars and a half in a large New York department store may be selected as a likely article for sale in this chain at a dollar. The manufacturer is then approached, and if sufficient volume seems assured, the brush goes into the chain at a dollar.

The same merchant is proud of the fact that he helped to popularize real silk hose at a dollar a pair.

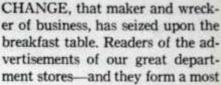
Is his method, in fact, price cutting? He might perhaps shudder at the suggestion; to him it is a matter of reducing the cost of living. What will be the attitude of the department store whose two dollar and a half hair brush comes out across the street at a dollar?

Not all department-store executives inveigh against price-cutting. One very successful merchandiser holds that it may be a great help to the manufacturer, since it speeds up the process of making an article a truly national product.

The whole question of price needs a reexamination and revaluation. The price policies of manufacturers who sell to chains, wholesalers and independent retailers have undergone considerable changes in the past year. Many producers have found it difficult to arrive at a suitable unit shipment which may fairly be offered to all classes of retail purchasers. Yet, if the machinery of distribution is to speed up once more and run without creaks, fair price policies to all must be achieved.

Perhaps price publicity would be more advantageous than many manufacturers realize. To hold the confidence of all types of distributors, it might be well for more manufacturers to take their customers into their confidence in the first place.

Change on the Dining Table

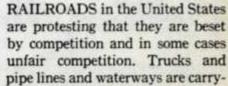


fascinating form of literature—have learned lately of new things. Two of them are non-breakable table ware and non-tarnishable silver.

The former, called—and we can't guess why—beetleware, is one of the synthetic resins, a first cousin to bakelite. From it are made plates and tumblers (we almost wrote glasses) and teacups in all gay colors. The non-tarnishable silver is called palladiant, a silver washed with a thin coating of one of the rarer metals, palladium.

These are the outward expressions of those changes, those X-forces that always threaten business. If these new things thrive how will glass and silver uncoated meet the competition? By price, by bringing to the front points in which they excel? And what becomes of makers of silver polish?

A Spanish Lesson —Not Needed



ing freight; automobiles and airplanes are carrying passengers.

What's to be done? Look to Spain for the answer.

When the Automobile Dealers' Association called on the Minister of National Economy recently to protest that their business was being ruined by the Spanish tariff they were told that the government not only foresaw but intended to cut down importation of automobiles and since Spain makes few cars that meant limiting their use.

It would, said the Minister, strengthen Spain's economic position if she had fewer automobiles.

"Moreover," said the Minister, as quoted by the New York *Times*, "we are going to increase the license tax on trucks, since they cut railway earnings."

A drastic way and a backward way and one this country will not follow.



Cost of government bureau propaganda increases every year

The Lobby We All Support

Building up bureaus by propaganda paid for out of public funds

CARTOONS BY CARD

inject a shot of publicity, and then watch it grow. The larger it grows the larger the doses of publicity it will require. These increased doses produce still greater growth, which in turn necessitates even larger doses of publicity. More publicity, more bureau; more bureau, more publicity.

It took government bureau officials at Washington many years to learn this simple progression formula but in the last ten years they have become remarkably adept in its application. The bureaus that have grown fastest in recent years are those best organized for publicity. The few bureaus that have no publicity writers—Bureau of Fisheries, Bureau of Lighthouses, and others—are little larger now than they were a decade ago.

Most of the federal bureaus have publicity writers whose job, ostensibly, is to keep the public informed of the results of government research. Some bureau officials frankly acknowledge that the publicity is also designed to obtain good will, to pave the way toward increased appropriations; others confess that, of course, it does no harm for a bureau to be in public favor.

Publicity made favorable

THE publicity men and women, naturally, write nothing uncomplimentary of their bureaus and bureau chiefs, or their bureaus' work. They must seize every opportunity to promote bureau interests through the press or radio, and to suppress, so far as possible, any news that might react unfavorably on the bureaus.

Officially, government bureaus have

no "publicity agents" or "press agents." Congress prohibits employment of "publicity agents," therefore, these employees are variously designated as information specialists, administrative assistants, assistants to secretaries, editors, subeditors and the like. An "assistant to the secretary" very often is a personal press agent who writes political and other speeches and is the Cabinet member's contact with the press. The identity of the persons who write feature articles and general publicity for Cabinet members is no mystery to Washington newspaper correspondents. The

THIS article is by a man whose business for the past thirteen years has brought him in close contact with government bureaus. He has had a good opportunity to watch their inner workings. He has seen their growth and the way they grow. His information is first-hand and authentic—although he himself must remain anonymous. He cannot afford to arouse the animosity of those with whom he deals

amount of money the government bureaus spend annually for publicity is anybody's guess. It may be approximated by an appraisal of the mail truck loads of "news" releases, pamphlets, leaflets, bulletins, feature articles, mimeographed reports and other forms of publicity such as radio sequences, motion pictures, and "still" photographs, that are hauled daily from the government publicity offices to the Washington post office to be dispatched all over the nation; or it may be estimated on the basis of the number of press agents and their assistants on the federal pay rolls.

Costs millions of dollars

THERE are in the bureaus no less than 100 visible press agents whose salaries range from \$2,000 to \$6,000 a year and three times that number of invisible press agents-all carried on the pay rolls under pseudonymous civil service classifications. Add the small army of typists, mimeograph operators, envelope stuffers, and other employees who perform the mechanical tasks of press agentry; add office rent, stationery expense, and whatever sum is properly chargeable for mail service. The total cost is not a question of tens of thousands of dollars, nor of hundreds of thousands, but of several million dollars a year!

The cost of a single government press release—approximately 10,000 press releases are issued annually—will run as high as \$500. This release may recount the extravagances of a wealthy Osage Indian ward; it may disclose the number of visitors to the national parks last summer; it may reveal the identity of a new cheese culture; it may tell the young mother how properly to bandage the stomach of the new baby, or it may be the statement of an official of the Federal Farm Board that, in his opinion, the Federal Farm Board is a great success.

If the story is sent to only 5,000 publications—the complete list of the Department of Commerce contains 15,000 names; that of the Department of Agriculture, 20,000 names—the cost of mailing alone is \$100, because, even though it is sent out under government frank, the expense on the public is there just the same.

The story is written by a publicity writer, it is approved by the official in charge of the intelligence, it is scrutinized carefully for possible unfavorable political or economic reaction, and edited; then it is mimeographed in bundles of from 1,000 to 20,000 copies, folded, stuffed into envelopes, carted to the post office, and ultimately dumped into from 995 to 19,900 editorial waste baskets.

However, should only five to 100 publications print the story, officials regard the expense as fully justified. They measure the results, not by the

number of publications that print the piece, but by the aggregate number of readers of those publications.

Officials of the Children's Bureau are among those who frankly admit, when they do not boast, that their publicity is intended to stimulate public interest in child welfare research.

A public demand for more research is synonymous with a public demand for larger appropriations with which to conduct the research. The Children's Bureau was born and is nurtured by publicity.

Principles of propaganda

THE technique of government press agentry, and the manner in which the nation's press is made an accomplice in propagandizing for more and bigger bureaus, are well set forth in the following excerpts from a mimeographed circular distributed by the Forest Service among its personnel:

If the press agent wishes to have his stuff printed, he will do well to conceal his real object, namely, propaganda. Newspapers conduct their direct propaganda in the editorial columns. Any propaganda in the news columns must be indirect—it must consist of a narrative of events from which the reader draws his own conclusions.

Consequently, the press agent's art consists of seizing upon real events and narrating them in such a way that the reader grasps their significance without feeling that he is being exhorted. News propaganda is a



Each December every bureau chief dumps into the mails mimeographed press releases describing the growth of his bureau during the preceding year

sugar-coated pill, and the medicine should never be evident to the taste. The safest and most difficult rule to follow is to make the story sound as if it had been discovered, conceived, written, and dispatched by the Associated Press.

The investigator into the arts and wiles of government press agentry is informed that there is a constantly increasing demand for government publicity, or, more politely, for the results of government research. This demand is said to come from newspapers, magazines, news syndicates, free lance writers, rotogravure syndicates, radio broadcasting stations, and other media of expression.

There seem to be continual demands upon the Chemical Warfare Service for knowledge of what it is doing in research with poison gases and chemicals; demands upon the Army Air Service for information on what it is finding out about air navigation; demands upon the Internal Revenue Bureau for financial information of all sorts; demands upon the Women's Bureau for feature articles and other press material that tell about woman's place in industry; demands upon the Patent Office for reports on new inventions and patents; demands upon the State Department for knowledge of foreign relations.

Just who is making all these demands for information is nowhere identified. It is just demand!

Anonymous demands

THE specter of demand for more research and the results of research hovers everywhere. Says the Geological Survey, "The Geological Survey as a fact-finding agency faces a growing demand for facts . . ." The General Land Office, ". . . these extraordinary demands on the field service . . ." The Radio Inspection Service, "Although greater demands are being made upon this service each year . . ." The Bureau of Foreign and Domestic Commerce, "Demands upon the Bureau for assistance in solving some of the perplexing problems . . ." The Bureau of Fisheries, ". . . increased demands for fish for stocking waters; for additional fish cultural facilities . . . demands for scientific investigations; for studies of every important fishery ... for an expansion of its investigative program with respect to such pursuits as oyster farming, fish farming, and prevention of diseases . . ."

The press of the country wants more news of what the government bureaus are doing, but its demand is for quality and not quantity.

It does not want the "canned music"



of bureaucrats who sing their own praise as astute administrators of government funds. It does not want the panegyric of a Cabinet member, entitled "Why I Am a Republican." It cares not that "too much water in the washing machine causes excessive splashing"; that "thin, crisp slices of overdried toast are delicious with soup"; that "three-cornered wire sink baskets make good receptacles for dusty and oily cloths in the cleaning closet."

What the press would like—if there must be government press agents—is some well written, unbiased statements of fact and intelligent analysis of current problems.

The press receives little of the latter type of material in the stream of government publicity that flows across its editorial desks. The reason for this seems to be that the bureaus have become so large that the scientists and other research workers are unable to agree on any specific proposition and it is therefore impossible for a bureau to obtain unanimity of opinion within its own ranks.

The only recourse for the Washington newspaper correspondent is to interview individual members of a bureau, privately. To circumvent this, some of the bureaus have regulations which provide that bureau personnel may talk to newspaper men only with the permission of the publicity office.

This ban displeases many government scientists, economists, and other professional workers, with the result that much of the news that appears under Washington date lines is credited merely to "official government sources," or carries the familiar phrase that "it was learned today from authoritative government sources."

The inside news of what is going on in one bureau usually can be ascertained by interviewing members of some other bureau, either in the same department or in some other department. There is no ban against gossiping about one's professional rivals in bureaucracy.

Interfering with economics

A FEW years ago a story escaped from the Bureau of Foreign and Domestic Commerce that caused a rise in sugar prices. Orders were issued immediately tightening up the requirements that all bureaus in the Department of Commerce must submit press releases to the central publicity office, where they would be examined carefully for undesirable economic or political reaction.

Similar instructions, by order of Congress, were issued in the Department of Agriculture as a result of press releases that affected the cotton market. The industrial world naturally applauds any effort to remove the bureau menace from commodity mar-

expression of opinion.

The flood tide of government publicity occurs in December when every bureau chief dumps into the stream, simultaneously, mimeographed press releases describing in detail the growth of his bureau during the preceding fiscal year.

This must be a sort of Christmas gift to the public, made with the expectation that the public in this season of generosity and good will will respond liberally in the form of increased federal appropriations. Some bureau officials become angry when their Christmas offerings do not make the front pages of the daily press.

Propaganda without value

A BUREAU chief who says that the "output" of his bureau, for which the public pays through government appropriations in the neighborhood of two million dollars a year, "is measured by its publications," recently reprimanded his publicity man because the bureau's publicity was not being given a prominent position in the daily press. He would give the press writer only one more chance. He wanted to see on the front page of the Washington Post next morning an article telling of the part that he and his bureau had played nearly ten months before in a marine disaster.

"Unless I see such a story," he thundered, "I-I-"

Fortunately for the writer the threat of dismissal was interrupted by a telephone call from the secretary of the department.

Editors of newspapers and magazines doubtless will be happy to learn that the output of government publicity is to be increased this year.

Information specialists

"SOME bureaus," says the Director of Information of the Department of Agriculture, in his annual report for the last fiscal year, "have long had information specialists to work with the press service in preparing news articles, features, and photos, with the result that the work of such bureaus has received much more attention in the press. Recently other bureaus have added men to their editorial staffs for such work, and still others are planning to do so soon."

This increased productivity

kets, even though it stifles individual will be in addition to the 25 million copies of popular and technical publications distributed annually by the Department of Agriculture; more than ten million lists of farmers' bulletins and leaflets, and 3,000 news and interpretive articles. The Director of Information says that last year, "more than 58 million pages of mimeographed, multigraphed, or rotoprinted material was issued by the Office of Information, and a large volume of similar material by the bureaus of the Department."

The Bureau of Foreign and Domestic Commerce also reports a steady expansion in publicity activities. It says that "the intensifying of all the statistical and informational activities of the Bureau last year meant a corresponding increase in the quantity of published matter.

"The output of the editorial division in printed and mimeographed material during 1929-30 was larger than for any previous fiscal period. Besides the regular publications-Commerce Reports. Commerce Yearbook, Statistical Abstract, Commerce and Navigation and the Monthly Summary-135 special publications, ranging in size from 20 to 600 pages were issued."

This was in addition to a weekly multigraphed statement of bureau activities, which is sent to 15,000 publications.

Persons who do not read the news-



IT IS characteristic of Americans to want to grow. The men who work for Uncle Sam are no different from the rest of us. They want their bureaus to become larger. They sincerely believe that government should give more service. . There is a limit to how far government should go, we believe. Government should not do anything for the individual which he can do better for himself. Government is always a costly thing-and the taxpayer always pays. Too much government shuts off initiative, deadens private enterprise. · Too much government is nothing more than socialism. That's why Nation's Business publishes this article—to point out some of the ways in which we get too much government

papers and magazines may hear the government publicity over the radio, or may see it in the movies. Indeed, as among the three channels of bureau expression, radio seems to be getting somewhat the best of the deal, as an increasing number of bureau officials are appearing daily on the air. Daily and weekly features include the "Housekeepers' Chat"; "Uncle Sam at Your Service"; "Primer for Town Farmers"; "Science Snapshots": "Uncle Sam's Naturalists," and other broadcasts. The bureaucrat rises eagerly to the sound of his own voice, and the broadcasting station is pleased because a large volume of "educational" matter on the program obtains for the station certain concessions from the Radio Commission in wave length and amplification.

Producing motion pictures

IN the government movies, the bureau officials can watch themselves making great scientific discoveries and disseminating the results to those whom the results are intended to benefit. Both the Department of Agriculture and the Department of Commerce are in the motion picture business and between them turn out 30 feature length films a year. The Navy Department now is installing talkies on battleships, and a Navy News Reel is made by Navy photographers in all parts of the world.

For persons who read only the picture newspapers, literally hundreds of thousands of "still" photographs of bureau activities are available Every bureau has a photographic unit that is a continual source of inspiration to writers and editors in the preparation of feature stories on government research. In many bureaus, also, members of the press may obtain portraits of bureau officials. These portraits show the bureau officials in various moods-gayety, concentration, preoccupation-as may befit the article to be written.

The men do not seem to care where and in what manner their portraits are to be used, but the women invariably inquire about this before granting permission to publish their pictures.

NATION'S BUSINESS plans to publish several other articles in the next few months showing how Government is everlastingly reaching out into new fields. In the June number Paul McCrea will tell about the "great bureaucratic shoe string investigation."



We have run up an enormous bill against our future salaries

Are Individual Debts a Good Thing?

By EVANS CLARK

Director, the Twentieth Century Fund, Inc.
PHOTOGRAMS BY REDDING

GENERATION ago it was considered rather immoral for an individual to be in debt. To-day, few up-to-date Americans seem to have any such feeling. Most of us apparently assume that the purchases of today can just as well be paid for tomorrow.

As a result, the average American family, according to the calculations of Dr. Franklin W. Ryan, is now nearly \$400 in debt. As individuals we have run up a bill of some \$10,500,000,000 against our future salaries. This figure—greater than all the gold in circulation in the world—represents only "consumer credit."

This debt—by its size alone—must have an important effect on our economic machinery. The rapidity of its growth has added to its influence. It is bound to be significant and yet nobody knows very much about it. Nobody can say certainly whether it is a good thing or a bad thing, whether it has aided prosperity or whether it is at least partly to blame for our recent depression.

Before these questions can be answered, it is necessary to examine the situation as thoroughly as we can in the light of what knowledge is at hand. In the first place how do we estimate this indebtedness?

To begin it will be well to define our terms. What is consumer credit?

I think most economists will agree that it is possible to

THE average American family today is nearly \$400 in debt and must depend on wages to meet its obligations. This willingness to mortgage the future may be good for business. It may be bad. But, as Mr. Clark points out, it is a fact that business does not dare to overlook

classify credit in three categories according to the uses to which it is put—investment credit, commercial credit and consumer credit.

Loans made to finance additions to fixed capital or permanent plant might be defined as *Investment credit*. Such loans are evidenced by bonds and other certificates of indebtedness which mature over long periods. Loans on the security of real estate mortgages might also come under this classification.

Commercial credit includes loans made to finance the production and marketing of commodities. Credit extended to the manufacturer and to the merchant against sales of the goods is included in this classification.

Instalments, open accounts, and "small loans"

CONSUMER CREDIT might be defined as loans or credits made to individuals to pay for goods and services bought by them in their capacity as consumers. These include, of course, instalment credit extended in the purchase of the more



Study showed that 88 per cent of small loans are used to pay debts

permanent commodities and so-called "small loans" made to meet family or personal expenses. They also include the usual charge or open book account credits made by the retail stores to their customers.

A brief review of the various kinds of consumer credit and the agencies which handle them is next in order.

The charge accounts of the average retail customer probably make up the largest single class of consumer credit. Only a guess as to its extent is possible.

The recent National Retail Credit Survey, conducted by the Bureau of Foreign and Domestic Commerce, indicates that the American public pays cash for only 58 per cent of its retail purchases. The remaining purchases are made on credit. Three-quarters of the credit is of the so-called open book account variety—32 per cent of the total purchases of the nation.

If the total retail purchases are about 48 billion dollars—Copeland's estimate in *Recent Economic Changes*—and if the concerns covered by the Government's recent survey are representative, the open-account credit extended each year probably totals 15 billion dollars. The National Retail Credit Association estimates that the average rate of turnover in accounts of this kind is 70 days. If this estimate be accurate, it indicates that open book accounts outstanding at any one time total about three billion dollars.

Instalment credit is probably the next largest sector of the field. The total volume of this sort of credit has been carefully estimated and a classification of its various divisions attempted. Milan V. Ayres calculated in 1925 that the total volume of instalment credit extended each year was a little more than four billion dollars, while the average amount outstanding at any particular time was about one half of that amount.

A large proportion of the loans extended to policyholders by life insurance companies can probably be classed as



CONSUMER credit—instalment credit, small loans and open book accounts—totals some \$10,500,000,000 in this country. Studying its relation to the depression, Mr. Clark finds:

- 1. Consumer credit agencies seem to have come through without serious impairment
- 2. Consumer credit was not a major cause but it may have aggravated the depression
- 3. In the case of some persons consumer credit is probably abused

consumer credit. Statistics gathered by the Association of Life Insurance Presidents, covering companies whose assets are more than 80 per cent of the national total, show that two billion dollars of credit of this kind is now outstanding. If all the companies were covered the total would probably reach \$2,500,000,000. Life insurance executives tell me that the average loan period in this particular kind of business is about a year. If this is true, the total volume equals the amount outstanding.

Personal loans are growing

THE fourth important area of consumer credit covers what is commonly called the small loan, or personal finance business. In this sector are included those agencies which lend cash in small amounts to borrowers who lack the collateral required by the ordinary commercial bank. This business has expanded in the past ten years. The best guess at the total volume of small-loan credit shows that it is probably as great as \$2,500,000,000 a year and that the credit outstanding at any one time amounts to about \$1,300,000,000.

At least nine distinct groups of agencies in the United States are primarily engaged in making such loans. These agencies may be divided into two broad subdivisions—unlicensed lenders and those which operate under the authority of the law, including the other eight groups.

The unlicensed lenders still probably handle a larger volume of loan business than any single group of agencies—according to the estimate of Leon Henderson, probably as much as 750 million dollars a year. Because the loan periods in this business are short, a large annual bulk of business can be done with small capital. The total working capital or credit outstanding at any one time among these agencies probably does not exceed 125 million dollars. Since loan sharks operate under cover no accurate statistics are available. Their interest rates are 240 per cent and up.

Pawnbrokers bulk next largest on the small loan scene with a possible business of 600 million dollars a year. Because the pawnbroker's loan period is comparatively long, the amount of outstanding credit is much larger in proportion than in the case of the loan shark—probably 400 million dollars. Their interest is 36 per cent.

The most sensational growth among the small loan agencies has been shown by concerns now usually known as personal finance companies. They operate under state regulations and are permitted to charge rates high enough to attract private capital. Loans made by these concerns are secured by a mortgage on the borrower's furniture and furnishings and sometimes also by a wage assignment. Because of this special form of security they are often known as "chattel loan companies." They charge 30 to 42 per cent.

Another group of companies combines a small loan business with the sale of investment certificates. These are usually called industrial banks. Concerns of this sort lend up to \$5,000 on the security of co-maker notes. Interest is generally discounted in advance on the full amount of the loan, which is repaid in monthly instalments and an investigation fee is also charged. These charges amount to an annual interest rate of from 17 to 30 per cent.

These companies probably do an annual business of 500 million dollars with outstanding credits of approximately 300 million dollars. The regular commercial banks have been comparatively slow to enter the personal small loan field. However, an increasing number of commercial banks are establishing what are usually known as Personal Loan Departments. Their rates are nine to 22 per cent.

Pooling savings to make loans

IN TEN years the cooperative savings and loan societies called credit unions have shown a remarkable growth. They are membership corporations through which members pool their savings and from which they may borrow in small amounts.

Credit unions now do a total business of approximately 63 million dollars a year with outstanding credits of 40 million dollars. Interest is 12 per cent,

Other groups of small loan agencies are remedial loan societies, axias and employees' plans. Remedial loan societies began as semiphilanthropic limited-dividend agencies to make small loans at low rates. They have proven financially successful, however, and now handle about 60 million dollars of credit a year. Their rates vary widely in different localities as does the security demanded.

Employee loan funds

AXIAS, or informal membership groups, probably do 50 million dollars' worth of business a year, usually on the basis of co-maker notes. A growing number of corporations are setting up special loan funds for the benefit of their employees. A recent canvass by the Merchants Association of New York shows that, in the Metropolitan area, 88 companies made total advances of \$900,000 a year on widely varying terms with rates running from six to 12 per cent a year.

A certain proportion of the loans made to individuals by regular commercial banks should probably be included in any careful classification of consumer credit. However, it is impossible from the public records of banking operations to segregate loans made primarily for consumption purposes.

According to Federal Reserve statis-

tics, outstanding loans to the customers of member banks last June totalled \$21,500,000,000. To make even a guess at the proportion of this total which might properly be called consumer credit, it would be necessary first to eliminate loans made to corporations. It would then be necessary to eliminate loans made to individuals for investment in real estate or other capital additions and replacements, and also loans made to individuals to finance the manufacture and distribution of commodities. The total remaining after these deductions would represent the amount of consumer credit handled by banks in the Federal Reserve system. The same calculation would have to be made for non-member banks.

Consumer credit at commercial banks

PROBABLY only four to five per cent of loans by commercial banks can be called consumer credit—possibly \$1,200,000,000. In making this calculation I am assuming that Federal Reserve member banks account for 75 per cent of the grand total of loans made to customers by all banks and that this total would, therefore, be about 27 billion dollars.

At least a small fraction of the loans extended by building and loan associations should probably be classified as consumer credit. While \$7,800,000,000 of mortgage loans made by building and loan associations was outstanding in 1929, only about 300 million dollars has been loaned on

> the security of members' shares. Presumably these latter loans should be classed as consumer credit.

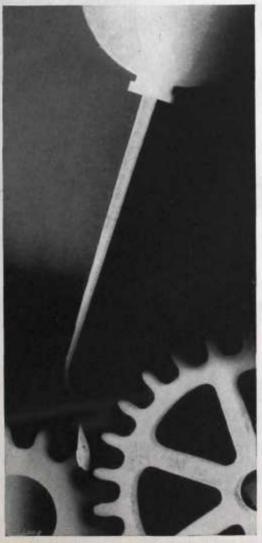
> The whole building and loan association development raises a question as to whether loans to finance the building of small dwellings should not also be included as consumer credit. On a strict interpretation of the definition used here they should probably be excluded, but any careful study should not consider this a closed question.

Having broken up the picture of consumer credit into its constituent parts, let us put the parts together again and view the results in relation to the broad panorama of our economic development.

I submit that not only should the facts of consumer credit be thoroughly canvassed by competent economists, but the implications to be drawn from those facts should be studied carefully. They are of immediate concern.

The whole development of consumer credit may be looked upon as an adoption by the individual of the methods which business has used from time immemorial. When the individual buys an automobile on the instalment plan the transaction

(Continued on page 110)



It has been assumed that consumer credit helped in making mass production possible

American Individualism



Our business leaders are meeting the attacks on our economic system with resistless daring

VEN in the presence of winter we think and plan for spring and summer. Winter, be it ever so hard, never kills our faith that summer will come again. Beneath the bark that looks dead we know that buds are forming. In the desolation of what seems death the resurgence of life is being prepared.

What a parable illustrative of our economic depression is here unfolded! The reality of the depression mocks our memory of the radiant optimism which, only a short time ago, proclaimed that a new era had dawned, that old laws of economics were obsolete and invalid, and that old-fashioned economic crises could not come again.

We are in the midst of a period of widespread and serious depression. Yet, there need be no despair. As surely as the twigs and branches testify that they are certain to produce again their glory of leaf and blossom and fruit, so there is abundant evidence that the soil of our national life is preparing a revival of prosperity.

The increasing boldness and vigor of the self-defense of

American industry and commerce is a significant and encouraging indication of steady, and relatively rapid, economic recovery. The leaders of the nation's economic life are meeting the attacks upon our economic system, not desperately as men fighting a losing battle, but with the superb audacity of men confident of Victory.

Socialism on the defensive

IN the face of the propaganda of enemies ranging from Communists directed from Moscow to the more dangerous advocates of government ownership of specific industries, the leaders of the nation's industry and commerce have for years seemed to be helpless. Now they are aroused and fighting with splendid and resistless daring, proving again that offense is the surest defense. Not the economic system, but its enemies, fight defensively now.

As a student of the social problem I have watched the development of this new phase of the struggle between the

Triumphant

By John Spargo

Author of "Why I Am No Longer Socialist"

DECORATIONS BY LOUIS FANCHER

opposing forces. In a narrow and limited sense I am merely an observer. In a larger and truer sense there are no mere observers. The influence of every citizen is cast on one side or the other, however unaware any individual may be of the fact. There are no neutrals in the struggle between the opposing forces which proceed from the conceptions of private property and individual incentives on the one hand and of collectivism upon the other.

Economic crises such as this have always accentuated the demand for what is euphemistically called "social reconstruction." The ugly and brutal twin phenomena of unemploy-

ment and poverty are the most effective of all the agencies making for social revolution. They lend support to preachers of revolt and to dreamers of vain and idle dreams. They are held up as the inevitable results of a weakness inherent in the system and due to its foundation in private property and individual incentives and enterprise. By implication the only remedy must be reconstruction upon other foundations. So we have the specious plea that the way to abolish poverty is to replace private property and individual enterprise in industry with government ownership and enterprise.

Industrialists are helping

VITIATING much of the discussion of this question is the assumption by the advocates of government ownership that they alone appreciate the evils and their magnitude, or that they alone are concerned about them. Of course, every intelligent person recognizes the evils of unemployment and poverty and of the consequences which attend them.

The desire and will to mitigate the evils and, if possible, to eradicate them are not confined to social revolutionaries. In the interest of honest and helpful discussion this fact should be emphasized. The reddest of Reds is not one whit more keenly aware of the evils, or more anxious to remedy them, than is the progressive leader of American industry.

THE tendency inherent in private ownership is toward enterprise and expansion,
says Mr. Spargo. The tendency of public
ownership is toward stagnation and decay.
He sees freedom for individual enterprise
as the factor which will carry this country
out of depression to new levels of prosperity more equally shared than ever before

Neither in the councils of the Labor and Socialist parties of the world, nor in organizations devoted to the propaganda of public ownership, is the will to remove the ills more generally and sincerely active than in the membership of such bodies as the Chamber of Commerce of the United States.

If the heads of our industrial and commercial establishments are skeptical toward the claims made for government ownership as a panacea it is not because they are less humane than the believers in the panacea, but rather because their understanding is rooted in ampler knowledge of the problem. The self-righteousness and self-esteem of reformers and

> revolutionaries need to be punctured.

Socialism and poverty

THE ADVOCATE of government ownership as a panacea for the ills of industrial society faces a challenge which is not to be met by any statistical juggling.

The outstanding fact in the economic life of the world today is that extent of government ownership and management in industry and the extent and depth of poverty are in direct ratio the one to the other.

Where government ownership and management are most extensive, there poverty, degradation and despair are greatest.

It is not of Soviet Russia alone that I am thinking. Within a generation the progress of municipal ownership in Great Britain has been astounding, but who dares assert that it has lessened the ills of the people? Mind you, I do not assert that those ills result from public ownership, or that increase of municipal and state ownership which has marked the development of the last generation. I do assert that, obviously enough, state ownership has not miti-



Dreamers and preachers of revolt make much of the twin phenomena, unemployment and poverty

gated a single economic evil. I assert, too, what is less obvious but none the less true, that the present appalling state of British industry is in part due to the extent of British collectivism, and that the difficulties in the way of economic recovery and regeneration are increased by the fact that government ownership and management, both municipal and national, has so seriously narrowed the opportunities for individual enterprise as to hamper the restoring and regenerative forces.

Individualism is more efficient

I BELIEVE it to be irrefutable that every increase in the functions of government in industry and business lessens the sum of economic well-being and weakens the whole system. That is the stern fact which Chancellor Snowden has had to face, and which he has made the text for those brave warnings against further economic adventures.

It is precisely upon the ground that I have sketched that the defenders of American individualism must take their stand, in my judgment. I have long since grown weary of discussions which use statistics to prove the relative merits of individualism and collectivism. Statistical juggling obscures the essential truth.

The average citizen reads that the citizen of Tacoma, let us say, pays less for electric current supplied by a municipally owned plant than the citizen of Portland pays for an equal amount of current supplied by the public utility company. The inference is that the Tacoma resident is to be envied and that Portland and every other American city should have municipal light and power service.

How is the average citizen to know that the cost of electric service in Tacoma really exceeds that of Portland; that essential parts of the cost of the service which the public utility company includes in the bill are, in the other case, buried in the general tax? Unless his attention has been directed to the fact that the public utility company pays a large amount in taxes, whereas the municipal plant pays no taxes, leaving other taxpayers to bear a greater burden by reason of that exemption, how can the average citizen make just determination of the conflicting claims?

In point of fact the statistical argument is of little importance. There is abundant evidence that, as a rule, excepting a few cases where exceptionally favorable conditions give municipal plants advantages which place them in a class by themselves, municipal light and power plants are inferior to privately owned plants both in quality of service and its cost, when the latter is fairly computed.

Suppose, however, that it were otherwise, that municipal

ownership gave equal service to that given by private ownership but at a lower cost. Even then the argument against public ownership would be invincible. What of the distribution of the profits made by the utility companies among thousands of investors and the diffusion of that immense sum through all the channels of trade and reinvestment? Surely omission of this tremendously vital factor must result in a grotesque travesty of economic judgment!

There is no reason why a municipality cannot supply its citizens with electricity as well and cheaply as a private company. It may even pay to the municipal treasury the equivalent of the tax the private company would have to pay.

Even so, an insuperable objection to the method would remain. It must fail to turn back that stream of new energy which a profit-making system infuses into the economic life.

It is not merely the fact that, could the advocates of public ownership succeed in the case of the industry upon which they have concentrated their main attack, they would immediately begin, with increased confidence and energy, to bring about the public ownership of some other industry; even more important than that is the fact that public ownership applied to the light and power industry—or any other great industry—would inevitably lessen the flow of new capital into other industries, with consequent arrest of growth and enterprise. The tendency inherent in private ownership is toward enterprise and expansion. The tendency inherent in public ownership is toward stagnation and decay.

Upon this broad basis the case for American individualism stands secure and unshakable. It is not the selfish individualism of the old *laissez faire* school, brutal in its disregard of social rights, glorying in the triumph of the strong, without compassion for the weak.

American individualism starts with the demand for equality of opportunity. It asks and requires that every gain in our collective power and well-being be diffused to the common benefit. But it insists that this social well-being can be best promoted and maintained by leaving private enterprise and individual initiative free from the shackles of bureaucratic government.

The winter of adversity is with us but there are signs of spring.

We shall recover with vastly greater rapidity than would be possible if, by reason of more extensive collectivism, there were less freedom for individual enterprise. In the certainty and rapidity of our economic recovery, and in the strides we shall make to new levels of prosperity, more equally shared than ever before, American individualism will again be justified.



The self-righteousness of reformers and revolutionaries needs to be punctured



A plant maintained in a high degree of efficiency may become obsolete in a few years

Look to Your Working Capital

By FRED W. SHIBLEY

Vice President, Bankers Trust Company

DECORATIONS BY DON MILLAR

ERTAIN facts stand out more clearly as the gloom of business depression lightens. One is the strong working capital position of most of our big business enterprises. They learned a lesson in 1920-21 and they had built up current assets to a point that they were able to outride any storm. It is not too much to say that the financial position of many of our great industries-those with the widest public responsibilities since they reckon their shareholders not by tens but by hundreds of thousands -is even stronger now than it was 18 months ago.

But when we examine the smaller industrial and commercial enterprises the outlook is much blacker.

Many of them are in precarious positions and the problem of their rehabilitation is one of the gravest of the many

that are lying along the road to complete economic recovery.

The factors that led to this condition are many, nor can we unsparingly condemn management whose working capital has been seriously depleted. In some cases fixed assets were built up in periods of prosperity and overgenerous dividends were paid at the expense of fluid capital.

Yet the bright spot in the situation is that as some learned wisdom in 1920 and were safe in 1930, so others will learn from 1930 and be safe when another depression occurs.



TOO many corporations have impaired their working capital and therein lies one factor which will slow up business recovery, says this banker who is in close touch with industry. What are some of the causes?

The continued accumulation of raw materials and stock in the face of falling prices. Improper drains on depreciation and obsolescence reserves. Payments of dividends out of surplus There is close analogy between the working capital of a company and the blood in the animal body. If the blood be reduced in quantity or altered in composition the body cannot function properly.

Capital should be liquid

THE same principle applies to working capital, the life blood of the industrial or commercial company. It should be sufficient in amount to do the work required of it and it should be maintained in a liquid condition.

If the animal body is starved through lack of proper nutriment, the blood becomes vitiated. Ill health and disease en-

sue. If the corporate body is unable to function efficiently, owing to depletion or stagnation of its working capital, its borrowing power is restricted, its credit disappears, and it faces liquidation.

As a man must maintain a healthy body if he hopes to attain happiness and well-being, so management must conserve working capital, reestablish it as quickly as possible when an unforeseen eventuality impairs it, and restore it to a liquid condition and adequate volume. What are some of the causes that have brought about this anemia of many of our industrial enterprises? What lessons have we learned from 1929 and 1930?

One primary cause, too general to be easily curable except by slow processes of education, is the unscientific attitude of business men in dealing with industrial problems. The average business man is an opportunist and an optimist.

He trusts largely to intuitions. The significance of research and analysis has not sunk into his consciousness. He is an intelligent, vital, and intensely interesting human being, but he is not scientifically minded. If he were he could have learned lessons of great value from the methods of the outstanding successful corporations and thus have avoided many of the mistakes which are now causing him embarrassment and worry.

Look back at what happened in 1929 and 1930 to such a business man as I have just pictured.

As a result of the satiation of markets which became manifest well before the financial panic of 1929,

prices of a great many commodities had fallen and the gap between cost and sales price had closed. Operating losses and inventory write-downs attacked working capital, consuming it rapaciously. Nevertheless, with their customary optimism, producers continued to accumulate stocks of raw materials and to pile up manufactured goods, even though the prices of these goods were falling daily. Then came the world depression.

Depreciation must be studied

HOPING that the depression would be brief, many corporations have continued to pay dividends out of the depreciation account and the earned surplus of former years, even when there has been little, if any, profit. This further depleted working capital. Excessive inventories of raw materials and finished merchandise can be disposed of only at ruinous prices and, consequently, creditors have scrutinized such inventories closely. With such a situation lenders of money are looking carefully into the future of a business as it is expressed in terms of a conservative operating budget.

One fact has been driven into the minds of the commercial bankers who lend money and of the manufacturing corporations which look to banking credit for additional working capital. That is how seldom the item "depreciation," annually charged to expense, has been soundly treated. This



The average business man is not fully awake to the significance of research and analysis

item should be regarded as a true reserve set up in the form of cash or its equivalent to provide not only for depreciation, but also for obsolescence of plant and machinery. Such a reserve should be conserved as a sacred fund to be employed for no purpose except the replacement of plant and equipment, the addition of new and improved machinery and, in an emergency, as working capital under an implied obligation that restitution shall be made of such working capital from profits in subsequent years or from the sale of capital securities.

In this machine age depreciation and obsolescence cannot be ignored. Maintenance and repairs are well enough in their place, but the current pace of improvements in mechanical processes is too swift for them. A plant maintained in a high degree of efficiency may become obsolete in comparatively few years. It is necessary, therefore, that manufacturers should reserve depreciation as a cash asset, not available for dividend requirements, a use to which it has been prostituted too frequently in recent years, particularly when the payment of dividends was required to maintain the market value of corporate securities.

A reserve fund helps credit

MOREOVER, depreciation should be treated as a fund accumulated for the proverbial rainy day, something tangible and quickly available in the time of need, literally, industrial life blood insurance. Such a reserve fund not only

serves such a purpose, but inspires confidence in a corporation's credit. Above everything else, it gives courage to the management which has had the will and the intelligence to lay it by.

Where no such fund exists, necessity is usually the controlling factor when buyers bid low and ruinous prices. The nerve to decline such offers often comes with a knowledge of the existence of such a substantial and comforting backlog. Manufacturers and merchants in a strong working capital position are not sacrificing their products and their goods today.

But the greatest and most persistent enemy of working capital is the cash requirement for dividends. Dividends are profits disbursed to stockholders. They are the wages of

capital. The stockholder has a just right to expect them as a fair return on his investment, but they should be paid only when they have been earned, and then only after provision has been made for current working capital requirements and for the depreciation and obsolescence reserve. They should never be paid as an expedient to keep up appearances.

The life and health of the corporate body is of essential importance



to its stockholders. Their primary concern should be to see that it is kept healthy and that, if it is not being managed properly, efficient management is obtained. After all, the executives of a corporation are merely the employees of its stockholders. These stockholders have not endowed the management with an inalienable right to conduct unsuccessfully the business of their corporation, or to impair the corporate body's good health.

Speculation in raw materials

ANOTHER evil which menaces not only working capital, but the corporate body itself, is the speculative buying and selling of the raw materials employed in the corporation's manufacturing processes. Capital is obtained, an executive is employed, factories are built, and machinery is installed, for the distinct purpose of purchasing raw materials, fabricating these materials into finished products and selling such products at a price higher than their cost of production and distribution, thus yielding a profit.

At no time did the stockholders intend that their money should be used to purchase raw materials beyond the current requirements of the business and in no case for the speculative purchase and sale of such materials. There would be no more reason for a life insurance company or a bank to speculate in rubber, copper, or cotton than for the fabricators

of these raw materials to do so. The only possible excuse for such purchases would be to employ cash capital over and above current operating needs.

American business in every department is entering a period of more intense competition than ever before. Tremendous possibilities of overproduction exist in practically all industries. The machinery of production and distribution is constantly being improved. The law of supply and demand which has exercised a dominating influence on business in every age, will continue its inexorable rule. Production must be coordinated with consumer requirements if profits are to be earned on invested capital.

A deeper wisdom, a greater measure of skill, are demanded of business men if they are to meet these conditions successfully. It is essential that chief executives of manufacturing corporations should no longer be merely producers, or executives, or administrators. They must also be merchants, and as such they must acquire those high and rare gifts, a knowledge of markets, a knowledge of what the complex and impulsive public wants, and why.

The maintenance of corporate health and the consequent stability of operation assumes a broader significance when steadier employment of labor is considered as an obligation and a responsibility of management. The time has come, apparently, when corporate management must recognize the fairness of such a request by labor.

As civilization progresses in a democracy such as the United States, it becomes more clearly recognized that a corporation must be so managed and controlled as to effect the greatest possible benefit, not only to the state and its stockholders, but to its employees.

It will operate to the best advantage of all concerned if it coordinates its activities with human needs and human desires which are exemplified daily by consumer requirements and by that intangible potentiality of

markets which represents their growth and their refinement. It must so operate as to produce the best merchandise possible in terms of quality, design, style, and finish, relative to its sales price, and further, that operation must be so managed as to obtain such a spread between the cost of its raw materials and the selling price of its finished goods as shall permit an adequate remuneration to labor in accord with current living conditions and also a satisfactory return on the invested capital employed in the business.

The corporation which functions under such a policy will discover that an assured profit obtained from such a planned scientific system of operation and recognized by all parties in interest as fair, will prove much more satisfactory through the years than the average profit obtained over a period of

peaks and valleys and of hiring and firing help, with the resultant inefficiency and dissatisfaction of labbor, plus violent fluctuations in the market price of its securities caused by constant changes in the dividend rate.

The attainment of such a high condition of management efficiency is a laudable ambition for every producing corporation. The way is being followed in part by many corporations today, but few have so developed the facilities of research as to control the flow of their products in coordination with supply and demand.

There is reason to believe that American manufacturers and merchants will rise to the occasion and adapt themselves to the requirements of the times. It is evident that cooperation has assumed a prominent place in their minds.

It is my firm conviction that socialization of industry will no longer be considered an attractive objective when cooperation is employed to coordinate supply and demand on an economic basis, fair to capital and fair to labor.



The cash requirement for dividends is the most persistent enemy of working capital



MEDAL
Richard B. Mellon, of Pittsburgh,
receives medal from American Institute of Chemists, along with his
brother, Secretary A. W. Mellon,
for distinguished services to the
science and profession of chemistry



BIG DAM
William H. Wattis of San Francisco heads Six Companies, Inc.
Will build Hoover Dam. He
learned of the award of the fiftymillion-dollar contract to his interests while ill in a Coast hospital

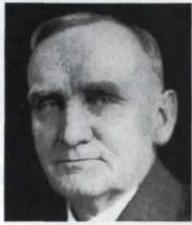


MERCHANDISER
At eleven D. F. Kelly went to work as errand boy in a store. In a few years he was managing it and has kept on running stores ever since. He heads The Fair, Chicago. Now he's president, N. R. D. G. A.

THEIR NAMES MADE NEWS



Here are their faces



BUSINESS JUDGE
C. W. Hunt was formerly a farmer
and farm agent in Iowa. Now he is
the new chairman of the Federal
Trade Commission under rotation
plan. Thus a real dirt farmer sits
as head of highest business tribunal



TAX BOSS

A. A. Ballantine, New York lawyer, is named to post of assistant secretary of the Treasury. Mr. Ballantine will have charge of internal revenue and other fiscal affairs. He succeeds the late W. E. Hope



UTILITY MAN
Chairman of the Board of eight
power and paper companies, president of 19 others, F. L. Carlisle of
Niagara Hudson Power becomes
board chairman of N. Y. Edison
succeeding the late N. F. Brady



FOUNDED INDUSTRIES
During the Civil War, Henry
Leland made rifles for soldiers.
During the World War he made
airplane motors. Builder of Lincoln and Cadillac, at 88 he
still visits his Detroit office daily



NEW HEAD, OLD BANK John C. Traphagen, once Chase Bank vice president, is to head Bank of New York and Trust Co., oldest bank in the country with original name. No mergers will ever include this bank, directors rule

Throwing Light on the Sales Tax

By SAMUEL W. REYBURN

President, Lord & Taylor and Associated Dry Goods Corporation

DECORATION BY GEORGE LOHR

business at present cannot stand the proposed sales tax. Disaster would most certainly follow in the State of New York if the legislature should enact into law any such proposal as the one to impose a tax of approximately one per cent on all retail sales.

Retail merchants could not possibly meet such a tax out of profits because many of them are not making any profits. The best of us are merely scraping along and keeping our heads above water. There's no use to blink at the truth. I am stating it and all merchants who look facts in the face know it.

Very well, then. Suppose they clap a

retail sales tax on us. If it can't be paid from nonexistent profits how is it to be paid? There are three ways.

- It can be passed along to the consumer.
- We can cut down our advertising appropriations materially.
- We can discharge a considerable number of our employees and shave wages.

Dismal

THE outlook is dismal no matter which way one turns. Now let me give the conclusions reached by myself and

others who have studied all angles of this retail sales tax proposal.

We merchants do not profess to be tax experts, but we do feel that, because of the nature of our business, we understand the expense, the difficulties and the injustice of a sales tax. Our business is selling and delivering many forms of merchandise to the public and receiving payment from the public—not to and from any one class, but all classes. We believe that the many contacts we make with the public have given us intimate knowledge of the inner workings and the economic problems surrounding the retailing business. We believe that the study we have given to this form of taxation has given us a thorough knowledge of the effects a retail sales





If the State demands a sales tax, merchants must reduce advertising, increase prices, or discharge employees

tax would have on our sales and that we can speak with authority on the subject.

We can assert positively that any form of a general sales tax would have a most disastrous effect on our business and, indirectly, upon the commercial and social life of the community. For that reason, we are unalterably opposed to any such proposal.

Let us consider whether a sales tax measures up to the requirements of a sound tax policy as laid down by Andrew Mellon in his work, "Taxation: The People's Business."

First, will a sales tax provide sufficient revenue to shift the burden to any appreciable extent from real estate?

It is estimated that annual retail sales

in New York State total six billion dollars. Under a sales tax of one per cent, which is consideredheavy, this would produce only 60 million dollars gross tax in-Administrative come. difficulties, evasions, exemptions and collection costs would whittle the net down to not more than 30 million dollars. This, mind you, is merely an estimate. Recent figures in Georgia indicate that the revenue from its sales tax will be less than half the "conservatively estimated" revenue. In West (Continued on page 114)



MR. REYBURN was one of the men who studied the sales tax at the suggestion of the Retail Dry Goods Association of New York. In this article he gives the results of that investigation and tells why he believes the tax proposed in his state would be an unbearable imposition on retailers and increase the cost of living

Are Our Antitrust Laws out of

By Silas H. Strawn

Chairman, Montgomery Ward & Co., and Former President, the American Bar Association

DECORATIONS BY D'ARCY



THE first antitrust law was passed in 1890. Since then business itself has outlawed many of the practices the law was passed to curb. But the law still exists. Is it necessary? Is it obsolete? Or are parts of it still necessary and parts of it obsolete? Mr. Strawn answers these questions with facts gathered from wide experience

USINESS men are saying that in these times they must know more about the law than they do about their business. With the modesty characteristic of our profession, we lawyers contend that the helpful lawyer must not only know the law, but he must know more about the general economic principles applicable to his client's business than does his client himself.

Business men and lawyers agree that governmental encroachment on the domain of private enterprise has increasingly restricted the field of business opportunity. This state of mind is commonly reflected in the assertion that the laws which have been heaped upon business have contributed to its present plight.

The present condition of business is anomalous in that throughout the world there are an abundance of capital, a superabundance of labor, and plenty of raw material. Nevertheless, production has slowed down because production and consumption are not properly synchronized.

In studying present conditions we face two fundamentally conflicting points of view respecting business and government.

Europe encourages combinations and monopolies, and has set up machinery for their supervision or regulation. The United States, on the other hand, has consistently adhered to the competitive system, and, as a matter of national policy, enacted the so-called "antitrust" laws to correct the existing and poten-



Proprietor and public are expected to share the benefits of today's mergers

tial abuses of the competitive system.

The first antitrust law was enacted in 1890 and, however mingled the feelings of the business community then were, it is becoming clearer day by day that a considerable body of opinion is questioning the present usefulness of this legislation. Among the objections to the laws are these:

1. That they are obsolete; that con-

ditions which they were designed to correct no longer exist.

 That they not only prohibit honest efforts to cooperate for the good of a trade or industry but, without specifically defining the offense, they declare such endeavors to be criminal acts, and subject the parties to imprisonment and to actions for punitive damages.

3. That instead of permitting economy in production with resultant benefit to the consuming public, they say: "You must duplicate the plant and equipment of your competitor and keep pace with him in the enlargement of his facilities and output, even though it be ruinous to the industry and ultimately prejudicial, not only to capital but to labor and to the consumer as well."

4. That the inflexibility of the laws and their drastic and uncertain criminal provisions, not only prevent the conservation of our natural resources but require a wasteful exploitation of them.

5. That the rigidity of the laws may have been all right at their inception, when the productive capacity of our domestic manufacturers was insufficient to meet the needs of the people, but that today large units of our industries are

vital to our foreign trade, and absolutely essential if we are to compete with foreign countries whose economic policy is on a different basis from that of the United States.

Irrespective of the divergent views regarding their present usefulness, these laws have been a powerful deterrent to business piracy and have been largely responsible for supplanting with order

Date?

and rules of fair play the chaotic industrial warfare of 50 years ago. Business standards have been raised to conform to competition in a market extended by advertising and an increased consumer demand.

Present-day mergers and consolidations are based on the conception that the public and the proprietor will share the

benefits of the larger unit. Cooperative agencies are also thought to be helpful in providing scientific data and trade information in a manner approved by the

If the causes which led to the enactment of the Sherman Act existed in 1890 and continued at the time of the adoption of the Federal Trade Commission Act and the Clayton Act, it would be difficult, if not impossible, to persuade the American public that some safeguards are now unnecessary. Therefore, may it not be assumed that it would be unwise and politically inexpedient for Congress to repeal those Acts?

Cooperation in public interest

IN A recent trade association case (Maplewood Flooring Association v. U. S.) the Supreme Court recognized that the public interest is served by the gathering and dissemination of information with respect to production and distribution, cost and prices, "because the making available of such information tends to stabilize trade and industry, to produce fairer price levels and to avoid the waste which inevitably attends the unintelligent conduct of economic enterprise."

The antitrust acts have not been and should not be interpreted as denying the individual the right to choose his manner and means of carrying on business, but rather to promote the com-



The United States has consistently adhered to the competitive system and, as a matter of national policy, enacted the "antitrust" laws

mon good by encouraging and rewarding initiative and the use of intelligent business methods. A noteworthy example of this underlying philosophy appears in the opinion of the court in Sinclair Refining Co. v. Federal Trade Commission.

The great purpose of both statutes was to advance the public interest by securing fair opportunity for the play of the contending forces ordinarily engendered by an honest desire for gain. To this end it is essential that those who adventure their time, skill and capital should have large freedom of action in the conduct of their own affairs.

Again, in Federal Trade Commission v. Curtis Publishing Company, the court expressed a principle inherent in American institutions and constituting the background, not only of the Antitrust Acts, but of our entire economic structure:

Effective competition requires that traders have large freedom of action when conducting their own affairs. Success alone does not show reprehensible methods although it may increase or render insuperable the difficulties which rivals must face.

During the 40 years of its existence no law has given rise to more important litigation, or employment to more distinguished members of the bar, than has the Sherman Act and its supplementary legislation. Hundreds of suits predicated upon the antitrust laws indicate that interstate commerce must be protected against the predatory acts of the selfish and unwise.

Each case depends upon its particular facts and the balancing of social and economic considerations. The responsibility for applying the rule of reason to the hypothetical problem devolves upon the lawyer. Unfortunately for him, the intermediate courts frequently disagree in attempting to draw a line between lawful and unlawful agreements. One court may conclude that certain acts constitute a restraint of trade and another may entertain a contrary opinion. Under present procedure, an administrative body may authorize a merger or reorganization as being in the public interest, while a reviewing court may not agree with its conclusion and order "the eggs unscrambled."

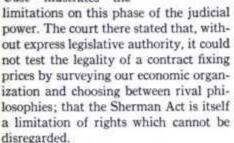
Promoting competition

IT IS true that the courts have not ignored the fact that sound competition is sometimes best promoted by intelligent and honest cooperation between the members of an industry, or by the imposition of reasonable restraints upon competitive practices, and have frequently so ruled in cases arising under the Antitrust Acts. Thus in Board of Trade of the City of Chicago v. U. S. the court announced the principle that "the true test of legality is whether the restraint imposed is such as merely regulates and perhaps thereby promotes

competition or whether it is such as study the Government's responsibility may suppress or even destroy competition."

But the Supreme Court's apparent willingness to interpret the provisions of the antitrust acts, so as to permit ac-

tivities and agreements having for their objects the advancement and stabilization of trade, will not serve as a general guide. Furthermore, the courts are limited in their right to inquire into the realm of reasonableness; they are without power to discard an economic theory that may have been entertained by a legislature years before and written into a law intended for entirely different circumstances. The Trenton Potteries Case illustrates the



So it is that financiers and business men may be required to wait years before they know whether a proposed undertaking is lawful and whether it may continue to exist. This state of uncertainty, coupled with the overhanging threat that any attempt at industrial coordination, may result in a criminal penalty and civil suit, stifles initiative and retards progress. The business man will necessarily hesitate before involving himself in an undertaking that may place him in the penitentiary and his business in bankruptcy.

Law hurts natural resources

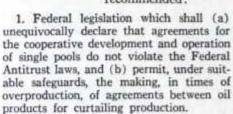
NOWHERE has this impotency to act been more keenly felt, and nowhere has the need for a flexible antitrust law been more strikingly presented, than in the industries exploiting our natural resources.

Realizing that the public interest would be irreparably injured if the depletion of our oil supply continued at the terrific rate which competition between private owners compelled, President Coolidge, in 1924, created the Federal Oil Conservation Board to

and to enlist the cooperation of representatives of the oil industry in its investi-

At the annual meeting of the American Bar Association at Buffalo in 1927.

> the chairman of the Section on Mineral Law appointed a committee to consider and report upon laws and proposals relating to the conservation of mineral resources. On the committee were three members of the American Bar Association, three members of the Federal Oil Conservation Board and three members appointed by the American Petroleum Institute. The committee's report, made at the 1928 meeting the Association, recommended:



The law is too inflexible

to meet present-day needs

2. Similar legislation by the various oilproducing states.

3. Further study into the matter of the waste of natural gas, that legislation might be formulated forbidding waste without working injustice and unreasonable hardship.

4. Legislation by Congress granting the Secretary of the Interior authority to join and to permit lessees from the Government to join, in agreements for the cooperative development and operation of single pools.

5. Passage by Congress of the legislation recommended by the Secretary of the Interior, removing the existing mandate re-

quiring him to offer for lease annually, regardless of conditions, 100,-000 acres of Osage Indian lands.

This report, together with the draft of an act to effectuate it, was approved by the Association.

Shortly after he took office, President Hoover declared for a policy to complete consideration of government-owned oil, and against the further leasing of federal oil lands during his administration.

State laws have been enacted which enable the oil producers to prorate their output within the several states, and they are now trying to cooperate pursuant to their policy of conservation. This plan is not entirely feasible, however, because a sharp distinction between activities of production and distribution must be observed in order not to run afoul of the Sherman Act. Such a hybrid arrangement cannot insure complete harmony of action. Copper producers, in attempting to work out a plan to limit their output, have encountered the same difficulties.

Regulation should be Federal

IT IS submitted that the conservation of natural resources, such as oil, coal, gas and minerals, which are necessarily limited in quantity, is a matter for national instead of state regulation. Producers should be able to ascertain in advance whether proposed action is law-

Labor, too, has its complaints. It feels that the antitrust laws were directed solely at combinations of capital and not at organizations of workingmen. It flatly denounces the strict enforcement by which the unions have been deterred from using the powerful secondary boy-

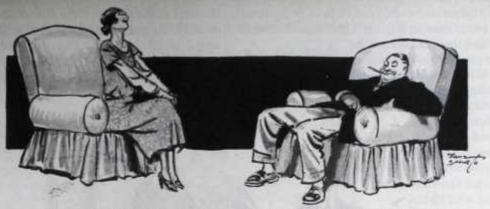
For different reasons, and to varying degrees, our federal lawmakers have seen fit to exempt railroads, national banks, agriculturists, steamship companies, exporters and producers of industrial alcohol, from the operation of the trade statutes. These exemptions, where they have sanctioned monopoly, have usually been accompanied by the extension of increased governmental control through administrative agencies.

The Webb-Pomerene Act is a definite recognition by Congress that, if our ex-

> porters are to be placed upon a basis of equality with the powerful groupings of foreign capital, combinations are necessary. Accordingly, it exempts from the operation of the Sherman Act those engaging solely in the export trade. You can easily see the difficulty of an industry complying with the Sherman Act and availing itself of the Webb-Pomerene Act when that industry is pro-(Cont'd on page 151)



Uncertainty as to legal rights stifles progress



Few women really sink into chairs. Conversely, a man digs himself in

Who Buys? You, Your Wife, or Both?

By WILLIAM BOYD CRAIG

Of the staff of NATION'S BUSINESS
ILLUSTRATIONS BY TONY SARG

O question is of greater interest or importance to the man who makes or sells any article than the old one, "Who is going to buy it?" The consumer has always been an important figure in the economic picture, but he is being noticed only recently. The buying habits of the country have changed greatly since the World War. Women have achieved an economic importance they never had before, both in earning and in spending.

It is perhaps natural that this new importance should be overemphasized. Women, young and old, now go into shops where a decade ago they were seldom seen. They purchase articles considered solely as male perquisites before 1914. Since they are so much more in evidence all along the economic horizon, too many have been led to believe that men do none and women all the world's buying.

In writing for women's magazines and talking to women's clubs, a former Federal bureau official has given definite figures as to the percentages of merchandise bought by women.

He told the Business and Professional Women's League that women "purchase about 65 per cent of the men's hosiery that is bought in the country and 62 per cent of the neckwear... No less than 85 per cent of the ultimate consumer buying of the country is done by them (women)... women assume a position of transcendent importance in the nation's business."

Coming from a high governmental agent, such statements have the ring of authority. Since no outside source or agency

RUMOR says that woman does practically all the buying of virtually everything from men's neckties to automobiles. Mr. Craig interviewed 50 informed executives to learn the truth of this rumor. Their answers indicate that anyone who regards father as a nonentity in buying is overlooking the important customer

is credited with having determined the percentages, the inference is that the official's department prepared them.

The truth is that no one knows what percentage of merchandise of any sort is bought by men or women. It is foolish to contend that a casual survey of some restricted section is typical of the country as a whole. Also, it is practically impossible to determine much about the actual origin of most retail purchases. So many trace far back into

the lives of men and women, sometimes of whole families, that no one can say dogmatically just where many sales start or who is primarily responsible for the purchase. Again, there is a distinction between purchasing as an agent and buying for personal consumption.

Who is the ultimate consumer?

IF a child buys a basket of groceries, does the retailer consider that child a customer to the extent of directing an advertising appeal in the hope of holding his trade? Obviously the statement that women buy 62 per cent of the men's neckwear is hard to support. It might just as easily be placed at 55 or 81 or 60 or 30 per cent. Nobody knows to a definite point in percentage. Every small survey must be only a sketch. What is true for New Rochelle, N. Y., may or may not be true for Carson City, Nev. All the coal in Newcastle may be ordered by housewives, but that proves nothing in particular except that those homes will be warm.

Only a few men can speak from experience about woman's

influence on the spending of the nation's money. Large retailers, small retailers, salesmen, buyers and other thoughtful observers were questioned to find out if, in their opinions, women were the whole show in buying. Their answers should interest retailers and manufacturers alike.

Nothing like a complete survey was attempted or, in fact, could be made. NATION'S BUSINESS sent the writer out to

talk over the problem with more than 50 informed executives. The ideas, conclusions and opinions here cited are theirs. These opinions were sought in the belief that they would be helpful to those who wanted to find an answer but who lacked the means of doing so.

Few men like to buy in department stores. Some will not. Others submit only under strong wifely pressure. The head of a big department store said recently that he was cheered because the number of men coming into his store seemed to be increasing.

Women he figured as constant customers. Any increase in the number of male purchasers might be classed as a net gain for the store.

The same official noted that the number of women coming along with their husbands for the purchase of men's suits is

increasing. On the other hand, the number of men accompanying their wives to the women's clothing departments is also increasing.

Generally speaking, woman's influence on the entire wearing apparel of the man is somewhat greater than the man's influence on his wife's clothing.

The man is admittedly consulted in most household purchases, regardless of his ultimate power in saying what shall be bought. China, furniture, rugs, and wall paper all pass some sort of masculine scrutiny before they are bought. The size of the investment in these and similar purchases makes this necessary in at least the lower income families.

Furnishing is continuous process

A MAN'S interest in home furnishing languishes somewhat after the bride is established in the home. In the mind of the average man, the job is done when the house is once furnished. Not so with the wife. For her, the initial furnishing is merely a starting point.

Perhaps a conference of furniture manufacturers with dress manufacturers would bring out some interesting points. Not all chairs are comfortable to women because they tend to disarrange a carefully dressed woman's clothing. Few women really sink into chairs. Conversely, no man seats himself daintily. He wants comfort. He wants to dig himself in.

Of all the classes of merchants interviewed, departmentstore heads are the most dubious about the importance of the man in buying at retail. According to an executive of one of the largest department stores, the average wife feels that, in matters of effect and ensemble for their home, her husband just has no taste. She consults him about her home buying, but this official holds that she does it to pacify him since he must have some sort of voice.

However, the same executive agrees that, whenever a mechanical element enters, the wife will defer to her husband entirely. A woman has no interest in merchandise which might possibly require tinkering. Even the suggestion of parts which get out of order kills feminine interest. On this point another department-store manager suggested that per-



Many women go along when their husbands buy new suits

haps manufacturers might make a more direct appeal to men. This could be done, he thought, with mechanical refrigerators, suction sweepers, heating equipment, including ranges, and a host of electrical appliances. Many appeals made on a basis of color and design might be broadened or changed entirely to one of stability, performance, and serviceability. Here the man is perhaps most nearly alone in determining on purchases, and a clearer recognition of this may prove of value to those seeing it first.

Recently a suburbanite and his wife were shopping on Saturday evening in a modern hardware store. The woman wanted an egg beater, and was looking at several. The husband's attention, meanwhile, was caught by an electrical egg beater nearby. They ended by buying the latter, at a cost of slightly more than \$20. The retailer's volume jumped \$20, but the important element in that sale was that the man appreciated sustained performance. As far as he was concerned, his wife's egg beating problems were over forever, or thereabouts.

When a man and a wife are shopping together, experienced retailers say that the man is the one who raises the price level, if the investment originally planned is to be increased. This is particularly true in the furniture lines. Here the purchasing process is complicated. Roughly, it follows somewhat the following lines.

The couple agrees that a new chair or table or bedroom set is necessary and may be purchased without disturbing the bank balance too seriously.

This decision having been reached, the wife begins to look about. She may study prices in one store or in a dozen. Next the husband is asked to pass on two or three or more possible choices which the wife has found. Department heads agree that a sale is definitely fixed in the woman's mind at this

Santific .

A SURVEY conducted in Elyria, Ohio, showed that, in the purchase of men's furnishings, men did more than half the buying among the poorer families, three-quarters of it in the moderately wealthy group, and all of it in the larger income division



But more men are accompanying their wives than formerly

point. It is now a question of getting the husband to agree on one item.

Using different sales appeals

FEW men will debate with wives in front of salesmen. Yet a wife resents it, perhaps unconsciously, if a salesman ignores her husband and talks with her exclusively. If there is a doubt between two pieces of furniture, for instance, where the price difference is considerable, the man almost always suggests that the wife decide on the item which pleases her. When the sale has gone that far, the man is eager to get it over, even if it means spending more than was planned.

In advertising to men, manufacturers and retailers alike stress the element of quality rather than price. This may or may not be a conscious effort, but the result is what counts. If inexpensive ties are being merchandised, the appeal to women will be that they may be had for 89 cents, or five for four dollars.

The same ties would be offered to a strictly male audience only with arguments that the neckwear was hand sewn, handmade or of unusually durable material and in acceptable patterns.

Few men apparently care for comparative shopping. A woman, on the other hand, is elated when she knows that she has made an advantageous purchase, regardless of the time consumed. Men as a group want to know the general price level of the shop they enter, but are not critical of individual prices to the extent that women are. Men seldom shop even for an item as enduring as a suit of clothes. Contrast this with the nicety of choice a woman exercises in choosing an evening gown.

Not all merchants agree that women are the determining

factor in the purchase of haberdashery. A leading Brooklyn department-store official says of women customers of men's wear:

"It is generally asserted that women buy most of the men's furnishings and that, therefore, men's furnishings departments should be merchandised primarily in line with what the women select, rather than with what the man's preferences might be. This is a merchandising doctrine prevalent, I am sorry to say, in most department stores. It may be sacrilege not to endorse it, but I definitely feel that this theory is not only shortsighted, but entirely illogical, for it trifles dangerously with what might be termed the ultimate consumer.

"Most women know little or nothing about items of men's apparel. The pattern which may be beautiful in draperies may not be quite so good for a man's shirt, and again, a pattern which may be beautiful for a woman's gown may be altogether inappropriate for a man's tie.

"The man and not the woman wears the men's furnishings, regardless of who buys them. Being the ultimate consumer, the

man is, therefore, the ultimate and the principal factor to be considered.

"A woman may buy a tie or a shirt but, if the man is not satisfied with the purchase, it either goes back to the store or, when the woman expresses her intention of buying again in the same store, the man warns her against it.

"We are entering the period of the emancipation of the American man. He is getting independent. He may still be letting his women buy most of his furnishings, but he scrutinizes their purchase more and more carefully. He is about to revolt. He will no longer let his women wish on to him whatever they please."

The city of Elyria, Ohio, wanted to find out things about the buying habits of its citizens. The Chamber of Commerce and the Department of Economics of nearby Oberlin College conducted a survey of more than 300 families, representing all classes of society. In the purchase of men's furnishings, men did the buying in more than half the cases among the poorer families. Nearly three-fourths of it was done by men of the moderately wealthy group. In the larger income division, men did more than 90 per cent of the buying. In men's clothing, the percentages of purchases made by males runs even higher.

Where husbands buy for themselves

NOT a single case was found in the wealthy group where the husband's clothing was bought by the wife or by the husband and wife together. Here husbands apparently have sole voice.

Who is responsible for the purchase of an automobile? Here is an object which combines utility, performance, appearance, and such miscellaneous factors as social position and family pride. Who says what shall be bought?

In the price range of \$1,000 to \$2,500, the man is the important factor for the salesman to consider. In four cases out of five, the wife defers to the husband. From \$2,500 on up, the balance apparently swings the other way. In the two, three and four car families, the lord of the manor is more content to permit latitude in the selection of a particular model. His judgment is still considered as to the make, however.

Women help in buying cars

FIFTEEN years ago a woman was not even thought of as a factor in purchasing a car. This was true of the Ford and it was true of higher-priced cars. A man's judgment was regarded as vital. Competition has brought a change. Women are frankly considered in the selection of models, trimmings and accessories. However, the masculine judgment is still active, although silent. Male influence is still present in car buying, even though women do more and more of the talking with salesmen.

Men's interest in cars is as strong as ever but it is somewhat less vocal. No longer is much club-room conversation devoted to the comparative pulling power or compression of rival makes of motors. Performance is taken for granted. Men choose cars because of a number of factors, price among them. The standing of the manufacturer and the price of company stock are hidden factors which carry weight in thousands of cases. Men seek such information, and get it largely through news and advertisements in magazines and newspapers. A woman's interest in a car seldom goes deeper than the paint.

When a salesman talks with a husband and wife, the husband has in most cases already sold himself. He may ask a few cursory questions, while his wife feels the finish and admires the dashboard.



China, furniture, rugs and wall paper all pass some form of masculine scrutiny before they are actually bought

The wife is thinking in terms of color harmony and how the car will look in comparison with Mrs. DePuyster's Ritz-Whistler when the two cars pull up in front of the children's school or the church.

A somewhat parallel experience may be found in the radio field. Where the family budget is ever on the mind of both husband and wife, the husband is almost always the one whose judgment is considered sufficiently technical to insure getting a serviceable and satisfactory radio. In the thousand dollar class, radio merchandisers direct their appeals to the mistress of the household. At that price, the question of performance is taken for granted, and style and looks become the important considerations.

A prominent senator bought an \$800 cabinet. Soon afterward the senator's wife summoned the salesman. He went fearing that the set had been found unsatisfactory. Instead, he found that the woman had discovered a finer set in the house of a social rival. Could he get her a finer one? The salesman could, and did.

Ocean travel is a commodity merchandised in various ways. To many it is merely transportation, but to an appreciable number it is, of course, holiday relaxation. Officials of steamship companies realize that their big job—that of selling the American public the desire to travel—is already accomplished. The great appeal of travel is escape. That may or may not be an indictment of American life. Americans travel, not so much to get closer to more ancient cultures, as to get away from the cultures and in-laws of their home towns.

The majority of those who walk up the gang planks at San Francisco or New York are getting away from something. This majority, however, is not the whole story. More and more of the first-class transportation is taken by the active wealthy class who have been persuaded by clever advertising that it is wise to seek change and relaxation from the world of affairs. To this group, sane living has a great appeal. Executives who plan their lives as wisely as they plan their worldly affairs see the wisdom of conserving energy for the decades between 60 and 80.

Sometimes those in this class, which is distinctly one of upper brackets, go in for yachts. Yachts are merchandised on a basis of performance, seaworthiness and comfort. The familiar remark that no man dares cost account his yacht

does not hold for those who own boats in the \$3,000 to \$10,000 classes. Such craft are sold on an appeal of utility, performance and safety. In the illustrations of these small yachts, the whole family may be seen looking happy and contented, but the text in the advertisement talks to father and his check book.

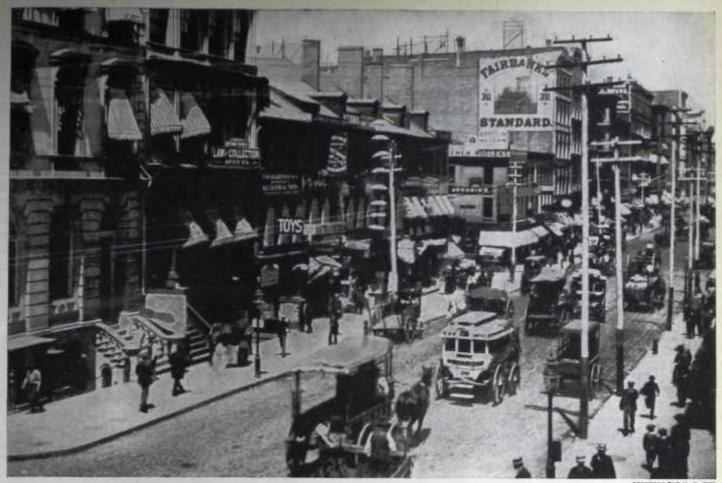
Men are still buyers

IT SEEMS evident, to the writer at least, that masculine influence is still important in the buying end of distribution. Perhaps that influence is less apparent on the surface than it was a generation ago, but it is still there.

The writer has no dogmatic conclusions to draw from this little study. This article has only one purpose—to show that some efficient business leaders still doubt that women are the whole story in retailing.

Perhaps, as a government official facetiously says, "It certainly seems the sheerest preposterous nonsense for mere man to intimate that he is of any serious consequence whatever, at least in the final retail stage of our business cycle."

Yes, perhaps it does. But maybe, too, the official is stretching it a bit thin. Possibly such an economic thesis may find itself one day in the same bin with the once plausible New Era economics. What do you think?



This placid business life moved past Broadway and Chambers Street, New York, in 1876

Keeping Step with Business Changes

By EDWIN C. HILL

Feature Writer, the New York Sun

HEN you walk into the unpretentious office of James Milliken Speers on the mezzanine floor of the handsome new building of James McCutcheon & Co., at Fifth Avenue and Forty-ninth Street, in New York City, it is difficult to realize that the trim, slender, alert, smartly dressed, thoroughly up-to-date gentleman behind the desk goes back in business experience to a period which seems as remote as the Civil War.

The chairman of the board of the famous old Belfast-born linen firm is so distinctly a figure and factor of the New York of 1931, so much at home in it and so much a part of it, that it is hard to picture him in the tranquil business



James Milliken Speers

life of the days when General Hayes was finishing an unpopular Presidency, when horse cars were jangling along the New York streets and young men were riding high-wheel bicycles; when Edwin Booth and Bernhardt and Modjeska were the popular idols, when Beecher was thundering in Plymouth Church in Brooklyn and Phillips Brooks was harrying the Devil and all his works from Trinity's pulpit in Boston, when there were no telephones, typewriters, electric lights, automobiles, motion pictures, airplanes and radio-when, indeed, Little Old New York and the U. S. A. seemed very simple and young and unsophisticated.

Yet James Milliken Speers, at 18, was beginning a half-century of busi-

woman.

That excellent woman took an interest in the morals and social behavior of the young gentlemen who dwelt with her. One had to walk a pretty straight line under the eye of that God-fearing

Retailing moves uptown

"I HAD had two years' experience in the linen business in Belfast, so I was not a greenhorn in the trade when I went into my cousin's establishment. For several years I did whatever it was necessary for me to do. We had only

business. A little later we moved to



A scene in the New York of 1880 as depicted by Frank Leslie's Illustrated Newspaper

ness experience in those times and in that atmosphere. For 51 years he has seen and been a part of many changes and transformations in the business world, in methods of doing business, in the distribution of products, and in the great advances in efficiency, economy and honest service to the public. For 51 years Mr. Speers has seen them come and go-great figures in the business world. He has seen names that once were blazoned brilliantly across the commercial firmament dim and disappear. He has seen innumerable changes and shifts in fashions-and, even more interesting-the growth in the public mind of fashion consciousness. Trade practices and credit systems have been modified and reformed under his observant eye. Even in the great mart of New York few men have had an experience as interesting as his.

He talked to me about some of the important transformations that have taken place during the half-century he has carried on in the linen trade. He came from a little town in the north of Ireland near Belfast, the great linen center. His uncle, John Milliken, came to this country from Newtownards in 1855 and established a linen business at 748 Broadway. Five years later Mr. Speers' cousin, James McCutcheon, also a nephew of John Milliken, arrived in New York and went into the business. Then John Milliken's health failed and he returned to Ireland. James McCutcheon who had purchased the business, brought over in 1880 his young relation, James Speers.

"It has been said that I came to America as a poor immigrant boy and worked my way up from the lowest rung eight employees in the store, which was at 845 Broadway when I joined the



The new station of the elevated railroad at 9th Avenue and 81st Street was an early sign of business expansion

of the ladder," said Mr. Speers. "That East Fourteenth Street, then to 64 West is hardly true. I came to New York under the kindest of auspices, by invitation of my own cousin. I was not exactly a poverty-stricken immigrant.

A quaint old town

"NEW YORK was a quaint old town as one looks back upon it, its population was just under two millions-none of the headlong haste and deafening din and desperate competition of these days. For a while I lived in the home of my cousin, James McCutcheon, as a member of the family, and then I took a room of my own in Mrs. Brolly's boarding house in Ninth Street between University Place and Broadway. I paid six dollars a week for board and room and it was good board and a comfortable room. James paid me eight dollars a week and the first year I saved \$60, better than a dollar a week. Living at Mrs. Brolly's was quite an experience. Twenty-third Street, then to the 14 West Twenty-third Street, then to Fifth Avenue and Thirty-fourth Street and finally to our present location at Fifth Avenue and Forty-ninth Street. It took 75 years for McCutcheon's to get this far uptown, but that is roughly the history of most of the retail trade.

"When I was a young fellow Tiffany's was at Fifteenth Street and Union Square west and Brentano's was near by. Lord & Taylor was at Broadway and Twentieth Street and Arnold Constable was down Broadway a block. Macy's was at Sixth Avenue and Fourteenth Street and W. & J. Sloane was in Broadway below Waverley Place. Stern's was in Twenty-third Street and Altman was at Sixth Benjamin Avenue and Nineteenth Street.

"I have seen the retail district march steadily northward, and it has been a most interesting study. In my judgment, though, the northward trend seems to be slowing up. Central Park interposes a barrier and the tendency now is for business to spread out east and west, just south of the park. Sixth Avenue will be tremendously important when the elevated structure is taken down and Madison Avenue even today has become a great retail shopping street, hardly inferior to Fifth Avenue in some respects.

"But the most interesting transformations of all have not been geographical," Mr. Speers continued. "It has been fascinating to contemplate the incredible growth of the slow, quiet New York I knew as a young man, but to a business man the changes in the methods of doing business are even more interesting.

"Of course in a business such as McCutcheon's, dealing particularly in imported commodities, the essentials of merchandising are just about what they were half a century ago. We have immensely improved many of the details of doing business—the actual machinery—but the merchandising essentials so far as such stores as ours are concerned remain, at bottom, about what they were. The big changes have occurred

in the great department stores and businesses that deal in great staples of one kind or another.

"The linen business is still in the hands of the North of Ireland Irish to a remarkable extent. The great Belfast houses which maintain their agents in New York and with which we of Irish origin continue to do business carry on as they have for the better part of a century—houses like William Ewart & Sons, Richardson Sons & Owden and John S. Brown & Sons, representatives of the highest type of concern.

Irish and Scotch control linens

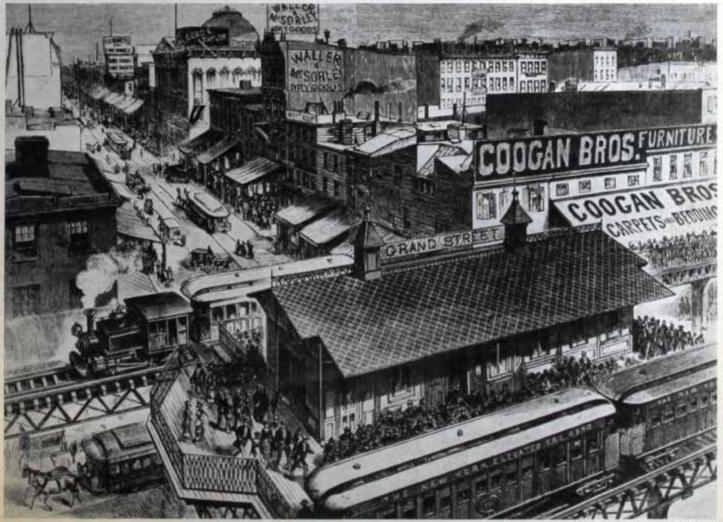
"WHEN I was a young man the big name in the wholesale business in New York was Claffin. John Claffin stood up like a giant in the trade. Tefft, Weller & Co., was another of the big concerns of the day and so was Calhoun, Robbins & Co., still going, by the way. Another fine old house was Dunham, Buckley & Co.

"Yes, the Irish and Scotch influence is still dominant in linens. The direct line of contact between the manufacturers in Belfast and the merchandisers in New York has never been broken off.

"One of the greatest changes that have come about is the eclipse of the wholesaler—or if not actual eclipse at least diminution. When I was starting business in New York the department stores and other large general businesses approached the manufacturer chiefly through the wholesaler and jobber. Business was not done in nearly so scientific a way in those days as it is today I am afraid.

"We didn't go much by charts, graphs and cost sheets of the efficiency experts. Some merchants kept their books pretty much in the lining of their silk hats. In many cases the bookkeeping was rather sketchy. In those days the purchasing departments of a big store kept some records which enabled them to keep track, in a general way, of what stock the store had on hand and of what it would be needing; of what would be required at certain times and seasons in colors, sizes, materials and so forth. As a matter of fact, however, the buyer relied as much on his memory as on his records. He would get together with his wholesaler and they would plot out

(Continued on page 131)



FRANK LESLIE'S SLLUSTRATED MEMSPAP

Passengers leaving the elevated at the Grand Street station found themselves in the heart of the retail section when Mr. Speers was beginning his career as an American business man

DANCER SELF OUT

WIDE WORL

The ceiling of the crusher in the Ford Rouge plant about to descend on a dismantled auto



WIDE WORLD

Ready for the furnace to become steel scrap. The crusher walls are made of salvaged steel rails

O the rank and file salvage suggests a more or less vague something that follows in the wake of mischief. We find in dictionaries a definition still restricted to "the saving of a ship or its cargo from the wreck; that which is saved from or after a fire."

And yet a new kind of salvage has sprung up. A salvage that knows nothing of fire or water except as these are harnessed to do its bidding. In a word, salvage has been set up in business.

Such, at any rate, is the status of this comparatively recent arrival as installed by Henry Ford. In every quarter of the huge motor plant at Dearborn, Mich., one may see salvage at work. It gives employment to 800 men and undertakes a job which reclaims a multitude of items ranging from tacks to freight barges. In performing this service, it shows a net profit of between four and five million dollars every year. Nor does this in any way pertain to by-products, which is quite another story.

Like all else connected with that industrial giant, which covers 1,100 acres on the bank of the River Rouge, the salvage division began in a small way. Ask Henry Ford what started it and he will tell you that "the waste worried the men." But it takes no son of a seventh son to guess that the waste likewise gave Mr. Ford very definite concern. He has long been foe to it.

The business of salvaging at Dearborn has recently been

Converting

chronicled in connection with the wrecking of obsolete motor cars. Irrespective of condition or make the Ford Motor Company has been buying through its dealers such cars at the uniform price of \$20. Already more than 55,000 have been bought, stripped and the skeletons melted in open hearth furnaces as the scrap ingredient necessary for making the finest of steel. Begun as an experiment a year ago, the quota has at times averaged 600 cars a day. This departure gives rise to a curiosity as to what extent salvage is carried on elsewhere in the Rouge Plant.

To cover at least a portion of the operations, let us begin on the third floor of the foundry building. Here is a room 20 feet wide by almost 400 feet long. It begins with files and ends with copper cable.

As for files, one finds that every kind and size are resharpened at the rate of 3,000 a day. Oddly enough, sharpening makes them better files than they were when they came from the supplier. Many types yield as many as 18 sharpenings. The work is done by blowing volleys of sand against the dulled surfaces. The sand renews the teeth without reducing the body. A single operator will restore 500 files in eight hours.

Rope and gloves, boots and hose

BEYOND the file section the twine makers work with a lathe fitted with radial hooks. Old rope is brought to them for unwinding. The hooks revolve to separate it into single strands, the strands wind themselves around wooden spools and go to the shipping department at one-third the cost of new stuff.

All Ford employees who work where there is dampness under foot are provided with rubber boots. Worn boots are sent to salvage. Reclaimed rubber scrap supplies bottoms or patches bruises. The average boot can be resoled half a dozen times at a cost of a half hour in labor and five cents' worth of material per pair.

Rubber gloves are patched, cured and sterilized. A single workman will mend 60 pairs a day.

Rubber air hose is reclaimed. New, it costs \$1.50 a foot, so no piece one foot or longer is ever scrapped.

Then there are the wooden bottomed shoes with arcticlike tops provided hot metal workers. As these wear out new soles are put on. Tops will outlast from four to five pairs of soles and the latter cost ten cents and can be added in an equal number of minutes. The wholesale price of new shoes is four dollars a pair.

Mop pails used by the cleaning squads are produced on a schedule of 150 a day from the five-gallon containers in which the company buys paint and at a fifth of what they would cost in the market.

In the Rouge Plant area are more than 30,000 motors and many switch boards. Presumably all fuses dispatched to

Waste into Net Profits

By Edwin P. Norwood

salvage are valueless except as each may yield copper and brass. Nevertheless, every fuse is electrically contacted. A man will test 1,000 in eight hours. Enough good fuses are found to pay his wage several times over.

Discarded bolts and nuts are rethreaded and retapped at the rate of more than 5,000 a day. Copper scrap is rolled into strips for leveling machinery or supplying resistance strips to the electric welders. Copper tubing that once condensed steam is drawn through eyelet dies to emerge as oil conduits.

Splicing electric cable

RECLAIMING electric cable is an intricate job. First it must be spliced. Next a sleeve is placed over the break. Then the sleeve is soldered and, finally, the entire part is insulated. Yet it has been found that, although there is no profit in repairing cable as short as 14 feet, a piece 12 inches longer shows a net saving over the price of new cable.

At the Rouge Plant an average of 45,000 pistons are made every 24 hours. That means almost nine tons of chips. To remove as much as possible of the

> A converted hay baler gets old rags ready for shipment

THE Ford Motor Company never throws away a board eight inches long. It salvages nails and used rope. It makes these operations pay a handsome profit. If the Ford Company can find time to plug these little leaks, no doubt other business men can find ways of saving that have been overlooked



Revolving claws reclaim nails at the rate of 75 kegs each day

water left by the cooling fluid necessary to piston machining, a dozen men formerly operated 12 centrifugal machines which "threw out" the wetness. Even so, five per cent of moisture always remained. This meant a 25 per cent loss in chips in melting because of the oxygen content. But one day salvage dug out an obsolete tumbler. The interior was fitted with plates arranged to keep the chips always descending, and a gas flame installed to keep them

always at the same temperature. Now the chips move by conveyors to the maw of the tumbler. Inside they sift about until they finally drop into receptacles. Containing less than one per cent moisture, they then go to a furnace of the indirect heating type, and from it are cast into pigs. The loss is reduced to less than two per cent. Two men handle the job.

Hills formed by waste material

ONE of the greatest salvaging jobs in history was Mr. Ford's purchase of 199 government war-built ships. These were towed to Dearborn. Thirteen were reconditioned, the rest dismantled and the steel set aside for scrap. One comes upon what remains in making a tour of the salvage department. West of the steel mill are hills and dales formed by miniature ranges of broken brick, paving blocks and this stuff that was once a part of the vanished fleet. As one enters the canyon formed by these piles, that which remains of the ships rises on the left.

The wall opposite is formed of broken brick and mounds of creosote blocks. No half brick ever loses its identity. It is cleaned and used again. Smaller pieces from furnace walls are sent by conveyor into a machine which pulverizes them. The output is ganister used to line furnace basins. Some is chrome brick debris. This, too, is reduced to supply the furnace masons with leveling material.

Much of the first floor in Ford shops is of creosote blocks. Constant use and scrubbings gradually take the life from them. Here in the canyon is a tank of creosote where two men impregnate worn blocks at the rate of 4,500 a day.

Leaving the canyon, one passes to where lumber and cardboard are reclaimed. No board that will yield a piece as large as eight inches long and an inch and a half wide is ever thrown away. All lumber is cleaned of nails.

Claws on a shaft set in a lathe do the yanking. An operator thrusts a board in the track of the revolving claws, the claws take hold and the nails come out. They go to the foundry cupolas at the rate of 75 kegs a day. A belt conveyor carries the cleaned lumber past men who sort it. The larger pieces are stacked. Bits which will not yield the minimum piece are carried to a man who diverts them to a minor conveyor which dumps them into wagons. They are used for cupola kindling. The good pieces go to the Plant's box factories. Every box of the 9,000 produced daily is made from this salvaged lumber. Of the scrap left from the sawing, the

smallest bits produce 30,000 wedges daily for use in casting flasks. Sweepings and sawdust contribute their mite toward generating power.

Nearby is a second conveyor belt. To it comes such material as damaged cartons which have brought supplies to the Plant. "Damaged," because no carton ever goes to salvage until it has outlived its purpose. In Ford receiving rooms all are knocked down and returned to the supplier for another load. Thousands give triple service, but, as they wear out, the remains go to salvage. At the head of the conveyor line is an electrically driven slicer which cuts the stock into de-

sired sizes for packing parts shipments. Farther along, cotton wadding from the wrecking of old motor cars is stacked on a belt according to kind, and moves to a made-over hay baler. Elsewhere machinery grinds wornout manganese and asbestos pipe coverings that come out of the Plant or from Ford boats. Mixed with water and a binder, these are reused as insulation.

From the section just visited, it is but a step to another converted hay baler which packages some 50,000 pounds of paper scrap daily collected by the cleaning squads. It goes to the Plant's paper mill to be converted into cardboard.

In the pressed steel building, compressors of a different type daily shape the 700 tons of scrap that comes from the making of car fenders and body parts or the manufacture of gasoline tanks. The bales move to an under-floor conveyor which deposits them in freight cars. All scrapped babbitt bearings are melted into pigs at the rate of a ton and a half every 16 hours. Some will contain as much as 30 per cent lead and only 60 per cent tin. But lead in Ford car bearings is limited to two-tenths of one per cent and there must be a maximum of 90 per cent tin. To overcome this difficulty, each pig is analyzed. When they are remelted to make car bearings, enough tin is added to offset the excess lead.

The "steel and iron yard" exhibits many piles of salvaged materials. In reclaiming structural steel, angle lengths must be separated from beams and rivets removed. Two men attack them with a powerful gun which works under compressed air. Its tongue is a chisel-like instrument capable of delivering a 150 pound blow. These blows kick off the rivet heads. Cleaned and painted, the units go into stock, while

rivet heads and shanks travel to furnaces to be melted into steel. Beams of odd lengths are electrically butt-welded.



Thousands of boxes used in the plant are built of lumber saved by salvage

Fence posts from tubing

SCRAP too long to go through furnace doors is fed to the "alligator." This machine crunches through pieces as thick as steel rails. Now and then it gets boiler tubing. Bitten into lengths, this is used for fence posts.

One sees remnants of castings from obsolete machinery that in their completeness weighed 40 tons. Nearby is a locomotive crane provided with a steel ball weighing five tons. When things are to be shattered for cupola consumption, the crane raises the ball and jounces it upon them.

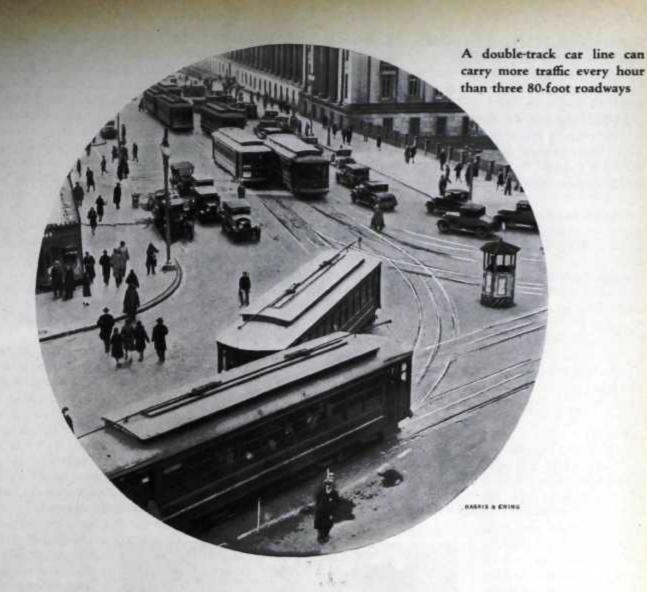
Stairways of iron or metal ladders that come to the yard are never scrapped. If short, they are

welded together. Likewise, all pipes not shorter than one foot, are joined into 12 foot lengths. The smaller pieces are made into nipples.

Steel tanks such as serve as containers for plating baths, if past repairing, become bins for stock. Cans that bring cyanide, oil barrels that leak, or steel drums that will no longer hold the contents originally meant for them, often give years of service as containers for nuts and washers.

In the Motors building, 240 automatic machines reduce surfaces or cut bar stock. The steel chips are diverted into

(Continued on page 108)



Car Lines Face a Changing World

By JOHN H. HANNA

President, American Electric Railway Association

of another generation, "never run after a street car or a woman; there'll be another along in a few minutes" is quite as true, so far as the street cars of the United States are concerned, as when some forgotten jokesmith first put it into print.

But Americans are not running after street cars any more—most of them. Tens of thousands who live or work in urban communities, where the public transportation systems are quite as good and probably better than they were when the old joke became current, seldom ride in any vehicles but



STREET railways have nothing to sell except transportation. When the automobile made every man his own transportation company, their market was seriously restricted. So they set about improving their product and their method of merchandising it. Today many of them are doing well. Others are profiting by their example. Their success or failure will affect your business

their own automobiles, or those of their friends, or perhaps a taxi now and then.

What caused this marked change in the riding habits of great numbers of persons? When we answer that question by pointing out the tremendous growth of the automobile industry and the enormous number of cars owned in this country, we must go on to others. Can the street car and bus meet the competition of the private automobile? Will they be able to win back any considerable portion of the business lost in the past few years and attract a reasonable share of the new business that constantly is created as cities grow? Is the street railway industry trying to increase riding?

Does anyone but a street railwayman, be he stockholder or operator, give a hoot?

To clear the way for facts showing that the industry is attempting in many ways to win back old business and attract new it would be better to answer the last of those questions first.

The business of transportation

IF NOBODY but those who are financially interested in street railways and bus lines cares about their future it is because so many of us have lost our perspective on public transportation questions. The business of carrying large numbers of persons in any center of population is today one of the most important in urban life, a business upon which commercial, industrial and other enterprises of that community depend far more than many of us realize.

We might take the case of John Brown by way of illustration.

Our John Brown is a business man. He owns a store not far from the heart of the congested area of his home city, which has a population of more than

half a million. He lives three miles from his establishment, driving down to work each morning and parking his car in a garage three blocks from his store.

He has been making the trip in his own automobile for years. He has almost forgotten that, when he built his house, he chose a lot only a block and a half from a car line. He is rather inclined now to regard street cars as impediments to his own rapid progress morning and evening. Sometimes he expresses the conviction that the tracks might well be torn up and the cars scrapped.

With that background we meet him first on a winter morning when a blizzard has moved into town. The wind

has roared through the streets from an hour before midnight to dawn. It has piled the snow high. The thermometer has gone to levels unusually low for his part of the world.

As he gulps his coffee, John Brown, the shrewd business man, figures out that it would be hazardous and unpleasant to drive down town in his own car. He telephones for a taxi, but a few thousand others have had the same hunch and have beaten him to the cabs.

However, he pats himself on the back. The old street car is just around the corner. He smiles as he calls to mind competitors who live many blocks away from car or bus lines; he wonders how they will make it; how many motors will be stalled on the snow-filled streets.

At his car stop he has to wait while two crowded cars go past. He gets aboard a third. He growls much of the way down town because he will be a little later than usual and because crowds, except in the store, rather annoy him. He swears he never will use public transportation vehicles again.

Yet if John Brown had thought only a moment he must have realized that an extraordinary and difficult burden had been placed overnight, without warning, upon his city's street railway and bus system.

He did not consider that there must be thousands who, that cold morning, did just as he did—turned to the public carrier for the first time in months.

I am not emphasizing the difficulty of handling such a tremendous and sudden increase in business, or that of pushing the cars or buses through. Problems of that sort are incidental to transportation and the records of systems over the land



Better lighted cars, with comfortable, leather seats are part of the campaign to sell car rides

show how they are met and conquered, not to the complete satisfaction of managements or patrons but in a manner which enables tens of thousands who otherwise might not stir from their own doors to go about their daily tasks.

John Brown didn't do much business that day. Neither did other stores. Neither did the theaters. Bridge parties suffered everywhere, many office workers did not get to work; factories were short-handed for hours; there was little

visiting in the suburbs. How much further would the normal activity of his city have been reduced if there had been no public-carrier system to shoulder the job of caring for him as well as others who were accustomed to turn their transportation worries over to it six times a week? How far into the lives of business men, of those who conduct places of amusement, of factories, of employers and clerks and professional men and women, of those who attend schools and colleges, of policemen and politicians, of all citizens, in short, does the question of adequate and dependable transportation go?

Perhaps some may suggest that, in the case of John Brown and the blizzard, no sound point can be made as to the importance of the public carrier, since it was an extraordinary occasion. Perhaps the best answer to that is twofold. First, American cities of fairly large size in one or two instances recently have found themselves without organized and coordinated public carriers. They have promptly shown a determined mind to possess such agencies.

Then a business which deals in billions of transactions in 12 months is not to be lightly regarded. The electric street

> railways and bus lines of the United States are carrying somewhere between 15 and 16 billion riders each year. That figure may be less for 1930 for the industry has suffered a loss as have others and for the same reason. But 14 or 15 or 16 billion car or bus rides are a considerable number. They prove either that a whole lot of folks are using such vehicles or some of them are doing a good deal more repeating in their rides than the industry knows about.

Heavy traffic on rails

ANOTHER fact that the business man might well consider is to be found in the results of traffic counts

taken in large cities of the United States recently. These surveys have shown that from 45 to 80 per cent of the passenger movement is now carried by public vehicles—subways, elevated railroads, buses, or electric cars operated on surface tracks. They show definitely that a double-track surface electric railway can and does easily carry in each direction 9,000 seated passengers per hour; that a four-track subway will carry 47,000 seated passengers per hour in each direc-

tion. A roadway 80 feet wide between curbs, carrying tracks in both directions will accommodate 2,000 vehicles an hour in each direction. These vehicles when used for individual transportation, carry, as shown by practically all the surveys, approximately 1.7 passengers each.

These statistics show that, in a city where traffic congestion is now a problem, the elimination of each double street car line would require, if the same number of passengers is to be accommodated, two and one-half additional 80 foot streets. In the larger cities where subways are needed, one of them would take the place of 14 such streets. Consider the expense to abutting property holders or to taxpayers in general of opening such streets in our congested districts. Moreover, the problems of traffic and parking space would be so vastly increased that the change would defeat its own aim.

For reasonable earnings

THE industry, then, directly or indirectly, is important to everyone who lives in an urban community.

But it is generally known that street car and bus riding is not what it was a few years ago. No one in the industry fails to recognize the significance of that fact. Altogether five and one half billion dollars are tied up in cars and tracks, power houses and buses, garages and trackless trolleys. The companies desire to make a reasonable amount of money on this investment so that service may be improved and extended and sums provided for depreciation of the properties.

What are they doing about it? What success is attending their efforts?

To put all the street railway and bus systems of the country on the same footing would not present a fair picture of the situation. Most of them are in hard straits, trying to serve the public as best they can, but there are conspicuous examples of properties which have tackled their problems in ways which apparently are proving successful.

In Youngstown, Ohio, the Municipal Railway Company—a private corporation despite its name—found itself up against a stone wall.

The owners of the property determined to lay their case before the entire city and permit it to bring about the solution.

The situation was put squarely before the City Council. It was told to civic organizations, to the newspapers, the rank and file, the car riders. It was the question of the hour in Youngstown and the city was aroused over it as it hadn't been aroused in years over anything. Its 200,000 inhabitants were told how the company must not only keep up service but must pay for paving between and immediately adjacent to its tracks, must remove snow, sweep the streets, carry public servants free and meet other extraordinary expenses.

Fortunately it appears the city was blessed with a Council which recognized tion for paving construction or paving foundation except where the tracks make additional foundation necessary. Complete relief was given also from repair of pavements, from all minor exactions such as sprinkling and street sweeping.

The franchise was written on the "service-at-cost" line with the usual stabilizing fund, which is a characteristic of such plans, the rise or fall of which above or below a stated sum is the



MCLAUGHLIN BROS., BALTINGS

Better looking cars with speedier acceleration have been designed to meet automobile competition

the seriousness of the situation and saw the possibility of Youngstown finding itself without city-wide coordinated public transportation given by a capable and responsible concern.

The Council appointed a committee of 15 outstanding financial, manufacturing and business men of the city. For chairman it had A. E. Adams, one of Youngstown's most prominent bankers. Among other members were J. A. Campbell, president of the Youngstown Sheet & Tube Company, and Harry L. Rownd, vice president of the Republic Iron & Steel Company.

Public hearings were held

THIS committee worked constantly for months. Meetings were open to the public and every citizen or interest was given opportunity to make suggestions or oppose those made by others. The two newspapers became forums for franchise discussion. After months of work, much of it done at night hearings, these business and financial leaders wrote a franchise which the Council adopted, which was approved overwhelmingly by the public and supported by the newspapers.

It freed the company from all obliga-

signal for an increase or lowering of fares. The company is permitted to earn, if it is able, six per cent on its original capital value, after taxes and depreciation and a seven per cent return on all additions to capital value, and to participate in surplus earnings.

After a year of operation under the new franchise, local transportation conditions are better than ever before. Modern service is being given by cars and buses; the company's credit is good, its public relations have been much improved and during 1929 it showed an increase of three and one-half per cent in traffic and substantial net earnings. At the latest annual meeting of the American Electric Railway Association the Youngstown company was given the Charles A. Coffin award for the greatest progress made by a local transportation agency in the previous year.

Municipal transportation in Chicago has suffered from politics so long that it appeared almost a hopeless job to bring about a real and forward-looking change which would provide for the extensions needed, for better coordination of surface car, bus and elevated lines. Until recently, all efforts failed. Then a

(Continued on page 138)

American Progress Depends

By CHARLES M. RIPLEY

Of the General Electric Company

PARTY of Chinese was being conducted through New York. In the subway their escort had them change from a local to an express train, explaining that the express saved two minutes.

One of the Chinese asked, "What will we do with that two minutes?"

When I first heard that story, I laughed. I thought the Chinese showed a superior philosophy. Later I realized that this incident answers a question that has brought investigating commissions from many European and Asiatic countries to America.

Europe and Asia want to know how America pays high wages and yet sells thousands of commodities in the world market at low prices; how we develop

our big home market; how we have raised the standard of living for the millions. They study production methods, sales methods, distribution methods, but they miss the one elusive common denominator of all American business and industrial effort.

The greatest single differential between America and other countries is simply this:

America has discovered the value of time, the importance of saving time and the necessity of liberally using appliances and services that save time.

To that discovery we owe our high wages, low selling costs, big home market and high standard of living.

Sages through the ages have recognized the importance of saving time, but Americans, as a people, are the first to put preaching to practical application—the first to develop "time sense."

This "time sense" reveals itself in many ways; in our mass production; our use of telephone and telegraph; our use of automobiles, fast trains, fast steamships, airplanes; our use of trucks, tractors, and farm machinery; our use of bookkeeping machines, typewriters, statistical machines, check signers, letter sealing devices, and visible filing systems; our use of vacuum cleaners, washing machines, and other household machinery.

All these save time and are, therefore, necessities in America today. People who do not use them will fall behind; homes which do not use them will be handicapped; farms that do not use them will be sold; corporations that do not use them will fail; empires that neglect their use will decay.

And—so closely is the fabric of civilization knit—the laggards are not only handicapping themselves—they are delaying the progress of those who recognize the value of time-saving.



ACCELERATION, rather than structural change, is the key to an understanding of our recent economic developments

HOOVER COMMITTEE ON RECENT ECONOMIC CHANGES, 1929 The business man who keeps a salesman waiting two hours in his outer office is increasing the cost of the product he buys from that salesman because he must pay for the wasted time that the salesman might have used in selling another customer.

The executive who refuses to give his workmen modern time-saving tools is reducing his own profits. Mass production is merely time-saving—making many products in the time formerly needed to make one and selling them more cheaply without reducing the total profit for the day, the week or the year.

The housewife who refuses to use modern household machinery and must spend her day in drudgery has no time to become a customer for party frocks, for radios, for books, theaters, or playing cards.

The nation whose people must grub a living by obsolete methods has a low standard of living and will continue to have because its citizens have no opportunity for imagination, education or progress.

A nation of time-seekers

AMERICAN business men have learned these things. Many of our rivals abroad have not. They speak of "Uncle Shylock" and say Americans are money-mad. They need only to read the advertisements in any national magazine to see their mistake. In a recent issue of NATION'S BUSINESS more advertisers promise to save time than to save money; more advertisers promise to save time than to increase production; more advertisers promise to save time than to increase sales; more advertisers promise to save time than to lessen overhead or upkeep; more advertisers promise to save time than to lessen overhead or upkeep; more advertisers promise to save time than to do anything else.

With the importance of time-saving so constantly emphasized no business man should fail to learn his lesson. Yet many do.



TIME that is past, thou never canst recall;

Of time to come, thou art not sure at all;

The present only is within thy power,

And, therefore, now, improve the present hour

LORD BYRON

on Minutes

DRAWINGS BY LEMUEL THOMAS

In a large middle-western city last month, I asked, "How is the Brown & Jones Car Company getting along? They used to be a big concern."

The answer came, "Oh, they shut up shop years ago. They didn't believe in making steel cars. That is, they didn't decide to make steel cars until it was too late."

A great business wiped out because its leaders delayed in reaching a decision, did not understand the value of time.

More than a hundred years ago Herbert Spencer wrote that a good organization should "provide means for bringing all available knowledge, and all available energy, to bear on the particular problem in hand at the precise time when needed."

Did not appreciate time

BROWN & JONES had the telephone and telegraph to bring the needed information; power lines were waiting to bring energy for motors, lamps and furnaces; rail, auto, air and ship transportation was available to bring supplies and people with energy and knowledge. But Brown & Jones did not know the value of time.

How different are the records of firms, large and small, that have learned this lesson.

A tire dealer in Chattanooga telegraphs his order to Cin-

cinnati every afternoon and gets his tires at eight o'clock the next morning. This keeps down inventory, lessens capital requirements, increases turnover and profit.

A food merchant telegraphs his orders. His stock is small and fresh. He keeps his customers and gets new ones.

One firm eliminated demurrage on tank cars, merely by ordering by telegraph.

Fast railroad service does its part in all of these, and faster rail service is likely.

Samuel Vauclain wrote, "Two billion dollars' worth of freight is moving on our rails each day. If we can move it

twice as fast, we can save interest on two billion dollars."

This constant demand for time saving does not mean that we must constantly hurry and bustle. Those who save time do not have to hurry. Speed prevents hurry. Speed is like an early start—it lessens the need for hurry. The man who rides across the continent in an airplane is not hurrying. He is doing just the opposite. He is starting later and arriving earlier. He does not need to hurry.

The man who takes a fast train from his home to his business and a fast elevator from the street to his office arrives earlier. He has more time. He telephones to his banker and saves the time of a trip to the bank. He isn't hurrying, he is



THERE is a lesson for American business men, says Mr. Ripley, in this conversation from "Zadig—The Babylonian", by Voltaire. Zadig passed certain intelligence tests conducted by the Grand Magi. Here are the questions and Zadig's replies:

- 1. "What, of all things in the world, is the longest and the shortest?" Zadig answered, "Time. Nothing is longer, since time is a measure of eternity; and nothing is shorter, since our time is insufficient for the accomplishment of our projects."
- "What of all things is the swiftest and the slowest?"
 Zadig answered, "Time; for nothing is more slow to him that expects and nothing more rapid to him that enjoys."
- "What is the most neglected and most regretted?"
 Again Zadig answered, "Time; for all men neglect
 it and all regret the loss of it and nothing can be
 done without it."
- 4. "What devours all that is little and enlivens all that is great?" And again Zadig answered, "Time; for it consigns to oblivion whatever is unworthy of being transmitted to posterity and it immortalizes such actions as are truly great."



TIME saving is the essence of mass production

COL. LEONARD P. AYERS

saving time. He sends a telegram and gets an answer within an hour.

He uses a dictating machine and turns to something else. Again he isn't hurrying. He has saved so much time he can afford to take things easy. He is doing more work because he is doing it more quickly.

He has leisure to improve his mind, to know his children, to rest, to think of new ways to save his own time and that of his workers.

And is this constant effort to save time making his workers mere automatons? Certainly not. A man with a time- and labor-

saving machine can do more work easily.

He can make more goods or perform greater service, thus commanding higher wages with which to buy the goods and service of other workers. That is what E. A. Adler had in mind when he defined mass production as "production for the masses."

Let those who complain of the monotony of the present machine age, consider briefly. What was more monotonous than following the old walking plow, or carrying a hod of brick or bending over a wash tub? Time-saving machinery has ended these monotonies. It has given a new dignity to labor. The Man with the Hoe was a poetic figure but he had little inspiration and little economic hope for the future.

Today the son of the man with the hoe is running a tractor. The son of the old cab driver is a chauffeur in smart uniform. The son of the hod carrier is operating an electric hoist.

The son of the village blacksmith is a skilled machinist or mechanic.

Their economic gain is higher pay. Their social gain is more leisure, more education and happier, more healthy conditions. The nation's gain is greater productivity and greater wealth.

America has progressed rapidly because it has learned to save

time. But it did not learn this overnight. It took 23 years to convince the first million Americans that they needed telephones. It took 18 years to convince the first million Americans that they needed automobiles. It took 25 years to get the first million trucks on the road. It took 22 years to induce the first million Americans to become electrical customers.

That was our rate of progress when only our leaders recognized the value of time. Now that the masses have grasped the idea we find:

A million additional telephones are installed every 18 months. Automobile registrations increase one million every year. The per cent increase in trucks almost exactly equals that of pleasure cars. A million new electric customers are connected every year.

Today the leaders in other countries are acquiring time sense. The masses are learning. It is to our advantage to speed their education because, as they learn to save time, they will become better customers. But we dare not rest where we are.

We think our present time-savers are fast. People used to the covered wagon thought the horsecar was fast. The early railroad was fast transportation to those used to the stage coach. The early steam-



EVERY moment may be put to some use, and that with much more pleasure, than if wasted. The value of moments when summed up is tremendous when well employed; but, if thrown away, their loss is irrecoverable

CHESTERFIELD

boat was fast to those who were used to sails.

Today freight trains a mile long go 55 miles an hour. Telegraph companies promise you an answer in an hour or less. The cable is almost as fast. The teletype machine writes instantly, miles away in many places. By telephone you may speak at once to some one thousands of miles away.

We will have more time

BUT new time-saving devices are coming. Television is one of them. Transportation by pipe line is another. America must be ready for them. Now, when money is cheap, business men have a great opportunity to replace old, slow, obsolete machinery with new, faster, better tools and equipment. This will reduce costs, lower prices and increase sales.

"What will we do with that two minutes?" one of the Chinese asked.

Some one might have answered:

"We will have time to buy cigarettes or cigars, or chewing gum or a newspaper or read an advertisement that convinces us we should buy a book or see a play. Or we will merely rest so we can start out again with greater zeal and less hurry."

Or the answer might have been:

"More than two billion car rides are taken every year in



HE who gains time gains everything BENJAMIN DISRAELI

New York City. Two minutes saved on each of those rides equals four billion minutes, or approximately four times the total time since the birth of Christ; or the time between 5793 B. C. and 1931 A. D. The integration of millions of minutes saved every day by millions of people year after year, is a colossal gain! To save time is to lengthen life in terms of achievement and happiness.

To save time is to progress.

What Higher Utility Taxes Mean to the Public

DIVERSE as the activities of public ceived from their customers in 1929," he utilities may have seemed to the public mind, the rôle of tax collector is not always recognized in the charge for service. This character comes to statistical' light in a statement made to the Public Service Commission of New York by Matthew S. Sloan, president of the New York Edison System. It was in connection with his companies' proposals for tax reductions that Mr. Sloan told of the tax situation.

"Out of every dollar of gross revenues which these four system companies re-

said, "no less than 9.95 cents went to the various branches of government as taxes assessed against our operations as public utilities.

"Operating taxes alone thus amounted to \$7.39 per customer meter, active and inactive, per year, or approximately forty-three one-hundreds of a cent on each kilowatt hour sold."

What these taxes mean to the consumer he explained by saying that "to the extent of \$15,759,383 a year, therefore, we act as tax collectors for the

government without profit to ourselves and electric rates have to be nearly half a cent higher, per kilowatt hour sold, and the revenue per customer meter \$7.39 a year more, than would otherwise be necessary. Our maximum rates and our average rates are lower than in 1914; our taxes alone are \$13,741,239 higher than in 1914."

Even the most hardened user of electricity may need extra insulation for his pocket nerve to withstand the fiscal shock of Mr. Sloan's tax ray.

-RAYMOND C. WILLOUGHBY



Transportation is an important factor in the operation of many businesses

HORYDCZAK

Who Needs Traffic Management?

By RICHARD WATERMAN

Of the Transportation and Communication Department, U. S. Chamber of Commerce

HE PLACE is the office of Mr.
Jones, president of a small concern that hopes to be large some day. Mr. Jones is at the telephone:

"Hello... Yes, this is Mr. Jones speaking... Yes, we ordered another carload; but we didn't expect to get it until next week... Here now?... No. We can't take it. We haven't any place to put it. Can't you hold it a few days on the track?... No. I don't want to pay demurrage. Can't you put it in the freight house?... All right—send it to the warehouse... No. I don't want to pay transfer and storage charges. That makes it a very expensive shipment.... No, I haven't a traffic manager....

Well, if this is a fair sample, I suppose we could save the amount of his salary several times over in a year."

Mr. Jones is a good executive. When

he found he was in trouble he called in an experienced traffic adviser and said:

"Mr. Smith, I need help. Something seems to be wrong with the organization of my business. My friends tell me that I am wasting a lot of time and money that I could save

by hiring a competent traffic manager. So I want to ask you a few simple questions.

"In the first place do you believe that it is necessary for every business to make some provision for its traffic administration?"

Here is Mr. Smith's reply:

"Yes, I do. It is generally agreed that traffic administration is a major phase

PERHAPS you feel that when your business gets big enough you can afford to employ a traffic manager. But size is not the only
measure of the need for a traffic department.
Your business may be one of those which
cannot afford to do without some one of
the forms of traffic management

of business activity. It is found in all industries, in all kinds of business. Transportation costs are sometimes 25 per cent of the total expenditures of a business.

"It is not possible, however, to offer any standard plan for organizing a traffic department. Shippers' requirements are similar but not necessarily identical. Each shipper, therefore, must develop an organization adapted to his particular needs.

"The United States Department of Commerce, at the request of the Associated Traffic Clubs of America, recently made a special study of traffic administration. The Department asked 20,000 commercial and industrial concerns, 'What provision do you make for management of the traffic and transportation features of your business?'

"The answers contained so much valuable information that the Department has published a digest of it in a special bulletin entitled Industrial Traffic Management-Its Relation to Business. What I am going to tell you, Mr. Jones, is based largely on the contents of that bulletin. In it, actual users of transportation tell how they corrected errors and effected savings, why they have traffic departments or why they do not need them, how various executives assist in solving traffic problems, what records they keep and what it costs.

Management for small business

"A FIRM may believe that it does not require traffic administration because its business is small. Nevertheless, if it spends any appreciable sum for transportation or if transportation is important to it in obtaining raw materials or in marketing finished products, it would seem to need some one who understands traffic matters. Size does, of course, govern to some extent the amount of traffic management needed.

"For example, one Ohio manufacturer tells us, 'Without our traffic department we would be compelled to go out of business. Competition is so keen that the traffic manager is really the anchor man and frequently his knowledge is the one thing that enables this concern to swing a big deal."

Said Mr. Jones:

"Granted that competent traffic administration is important. Still I am not quite sure what the division of labor would be. What are the functions of a traffic department?"

"A well organized traffic department," Mr. Smith replied, "has five groups of functions:

"First-administrative functions, including cooperation with all departments within the organization in such things as locating plants, warehouses and branches; keeping executives informed of changes in freight rates and service; determining the proper size of purchase and sales orders from a transportation standpoint; designing containers and selecting proper packing materials; and also cooperating with local,

matters as filing complaints and inter- a traffic side to each of them?" vening in rate cases, testifying before carrier rate committees, state commissioners and the Interstate Commerce Commission and obtaining revisions in tariffs, rules and regulations.

"Second-traffic cost functions, including quotations of rates; preparing rate case exhibits and statistics for use as evidence, accounting for transportation expenditures and paying transportation bills.

"Third-traffic service functions having to do with all the different transportation agencies that serve the concern railroads, terminals, docks, waterways, highways, airways, telegraph, telephone, cable and other outside service companies.

"Fourth-physical-handling functions within the plant, including the management of all activities connected with the actual handling of goods received, stored, assembled, packed and shipped.

"Fifth-plant facility functions having to do with providing, maintaining and operating transportation facilities that are owned by the concern.

"This is a large order. A competent traffic manager is entitled to rank with any other department head and to be a member of the firm's executive commit-

Avoiding litigation

"IN ADDITION, he must maintain agreeable contacts with the carriers and with competitors and, whenever possible, settle rate controversies informally rather than by formal litigation. One community traffic department says, 'We handle probably 300 rate adjustment controversies each year and, on the average it is necessary to refer only three or four of them to the Interstate Commerce Commission.'

"A traffic manager, given the necessary authority, can prevent a great deal of waste that is unavoidable when other departments attempt to handle traffic matters without proper equipment. For example, an official of a large machine works in Connecticut says, 'Our traffic department has full control of all matters pertaining to transportation. No department can arrange for any kind of transportation without the approval of the traffic department, and the traffic department has the last word as to the necessity for emergency movements, which are the expensive ones."

"You have told me what the complete traffic department undertakes to do, but I wish you would tell me more about how it can help the other departments

state and national organizations in such of a business," said Mr. Jones. "Is there

Many savings are possible

"THERE is," Mr. Smith replied. "The traffic department can make suggestions that will save a tremendous amount of money. For example, one large manufacturer says, 'By a close contact between the shipping and the traffic departments many thousands of dollars can be saved through proper routing. consolidation of freight, and the making of arrangements for the carriers to accept freight directly from plant instead of at piers and railway stations. Proper dispatching of trucks and the accumulation of full loads save considerable in a year.'

"The nature of the cooperation between the legal and the traffic department in any company depends on the company's policy regarding traffic law matters. In some companies the traffic department has no authority to handle legal matters; in others, the traffic department cooperates in handling rate cases and loss and damage suits. In still others, the traffic department has authority to look after all traffic law matters and is held responsible for results.

"Traffic and transportation activities not only facilitate manufacturing operations, they are an integral part of the operations themselves. Take away the plant's transportation facilities, and materials handling, storage service, and production would stop.

"Few concerns, apparently, know what their transportation costs; yet in the opinion of a California shipper, 'Any man who figures on a bid including transportation costs, and does not obtain advice from his traffic manager. invites loss of the bid and a claim."

"The traffic department can help the purchasing department to buy all kinds of transportation service, including storage and communication.

"It can help the accounting department by auditing transportation bills and the transportation items on merchandise invoices.

"It can help the finance department by preparing budgets covering expenditures for transportation, and often by recovering considerable amounts on claims for overcharges and damages.

"It can help the order department by routing orders, suggesting methods of expediting or simplifying the shipment of freight and tracing shipments that go

"It can help the advertising department by supplying transportation rate

(Continued on page 94)



Pride and satisfaction for the salesman Prestige and economy for the firm



Today's business car to be 100% efficient should please the man who drives it as well as

satisfy the firm that owns it. American business has just this kind of car in the new Chevrolet Six.

Salesmen like it, for the same reason that thousands of men and women are choosing it as their personal car.

There's comfort in riding in Chevrolet's spacious interiors, on Chevrolet's long, fully supported frame. There's comfort, too, in driving behind a multicylinder engine, free from the tiring effects of rumble and vibration. Then, too, Fisher body craftsmen have given this Six the smart lines and clean-cut style that make a man proud to drive it

—that give customers a fine, favorable impression of the firm that owns it. Yet with all these fine-car advantages, Chevrolet offers the lowest operation and maintenance cost of any car on the market.

Chevrolet's six-cylinder smoothness means less wear-and-tear on every vital part of the car, less depreciation, longer car life. Chevrolet's quality design and construction increase the car's ability to keep running, steadily, without need for frequent repair. And the cost records of large fleet operators show that Chevrolet's gasoline and oil economy is unexcelled.

More and more firms in every business are using Chevrolet equipment. Especially in these days, it pays to have efficient economical transportation.

Chevrolet passenger car prices range from \$475 to \$650. Chevrolet truck chassis are priced from \$355 to \$590. All prices f. o. b. Flint, Michigan. Special equipment extra. Product of General Motors. Low delivered prices and easy terms. Chevrolet Motor Company, Detroit, Michigan.

NEW CHEVROLET SIX

HE GREAT AMERICAN VALUE

No Business Can Escape Change

IRON puddlers for centuries produced wrought iron by hand, mixing molten iron and silicate slag in little furnaces. Metallurgists long and vainly sought mechanical methods. Dr. James Aston, Carnegie Institute of Technology, finally pierced the mystery, made possible mass production. A. M. Byers Company is utilizing his invention in a new \$12,000,000 plant near Pittsburgh.

ELECTRICALLY operated, the new plant of the Sharon Steel Hoop Company, Sharon, Pa., rolls steel strip so fast that one end is in the shipping room before the other is out of the furnace. . . .

AN all-metal house, made in sections easily set up, sells in Germany for \$1,000, exclusive of plumbing and general fixtures. Of bungalow type, the entire exterior is of cop-

per, and the interior walls and ceiling of sheet steel. . .

ELECTRIC eyes watch the step of shoppers using 17 passenger elevators in the store of R. H. Macy & Company, New York. Devised by Westinghouse engineers, the "eyes" permit fast and safe closing of elevator doors. A coming shopper casts a shadow, halts the doors. . . .

WESTINGHOUSE also has developed an elevator with two cars operating separately in the same shaftway and which may affect future design of skyscrapers. Studies indicate the plan may save floor space rentable at from \$35,000 to \$80,000 a year. . . .

A NEW small grocery bag for potatoes, onions and similar farm products has been developed which offers a further use for cotton. Woven in one piece, one side is of very open mesh—a show window through which shoppers may inspect the contents. . . .



The machine finally has displaced the sinews of the puddler in the making of wrought iron



OVER the horizon of business there comes a never-ending procession of new things and new processes. Their effects may be far-reaching, touching not one but many industries. In today's battle of business he who would survive must be ever ready to seize opportunities, to change to meet new competitions

INCREASING use of whale oil for edible purposes in Europe is creating a problem for American meat packers. A diminished demand for American lard is said to be evident in that market.

THIS country's first rubber roadway is reported laid on the approach to a new bridge in New Jersey. Diamond-shaped blocks, one inch thick, are fastened to a concrete base. Advantages listed: silence and durability. . . .

THE new Dollar liners, President Hoover and President Coolidge, have automatic radio-equipped lifeboats. Passengers, totally unfamiliar with radio, can send SOS calls merely by throwing a switch. . . .

SLOT machines have invaded the insurance field in Ger-

many. Placed in railroad stations, they receive coins from travelers, issue an accident insurance policy ticket. . . .

COIN-IN-THE-SLOT gasoline pumps are coming into use. Slots take quarters, halves, dollars, an electric connection starts the pump which raises the correct amount of gasoline into a visible glass bowl. The motorist pulls a chain, emptying the gasoline into his car tank. Twenty-four-hour service, no overhead for attendants, a strictly cash income. . . .

ANOTHER new slot machine solicits the pennies of diners in cafeterias. Placed near the cash register, they proffer one cigarette for one penny. . . .

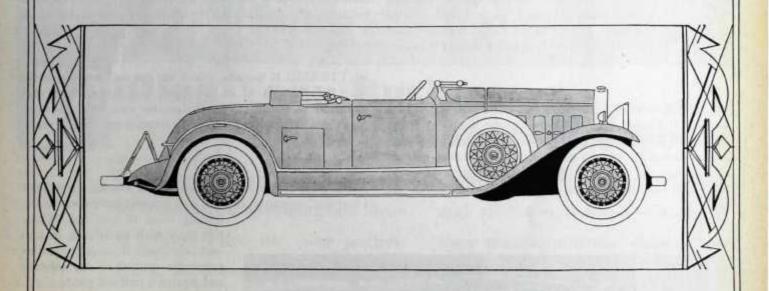
AND in New York an "automat" grocery has been opened. You needn't wait for the clerk to wait on you. . . .

HORSES, horses, saddle horses, particularly. There are more



Even if LaSalle were stripped of those distinctive characteristics which brand it so unmistakably as an aristocrat among motor cars—one fact would still remain to proclaim it a superior automobile. LaSalle is built by Cadillac, and in every feature of its design and in every process of its manufacture, is held to the same high standards as Cadillac itself.

LASALLE V-8



The new LaSalle V-8 applies to eight-cylinder design the significant advancements in engine, chassis and coachwork developed in creating the new V-8, V-12 and the V-16. Shown above is the LaSalle 2-Passenger Roadster, coachwork by Fleetwood. Price range, \$2195 to \$3245, f. o. b. Detroit. The liberal G. M. A. C. payment plan is recommended to all purchasers

CADILLAC MOTOR CAR COMPANY, DETROIT, MICHIGAN
Division of General Motors

of these in the United States than ever before, says J. O. Williams, of the Bureau of Animal Industry. A large saddle company confirms the news. It is producing more saddles than ever before. . . .

FIFTY years old, the Union Special Machine Company, Chicago, is celebrating by turning out a sewing machine that seams bags at 4,000 stitches a minute. Ten stitches to the inch, 331/4 feet of work passes the operator in 60 seconds. On shirts and overalls, there are machines that make 4,200 stitches a minute. . . .

ALSO in Chicago, more than 50 leading contractors and engineers are working out a new building code. Present code was adopted in 1911. The new one, permitting use of materials and designs unknown then, is expected to cut building costs at least ten per cent. . . .

A NEW system of recording and projecting talking pictures eliminates electrical sound reproduction, permits as large a space on the film for the picture as did the old silent film. A needle engraves the sound on the edge of the film outside the perforations, producing a variable groove similar to that on a phonograph disc. . . .

A NEW system of combine harvesting, with crawler tread under the harvester, has been tried in water-covered Texas rice fields. It is said to reduce time and labor cost; improve grade of rice; reduce grain losses; obviate weather hazards, 60 to 70 acres daily being harvested; increase soil fertility through longer stubble and scattered straw; decrease need for itinerant labor, and leave fields in better shape for following year. . . .

ANOTHER kind of harvester raises Cain with sugar cane on 150,000 Florida acres belonging to the Southern Sugar Company. It weighs 34,500 pounds, goes through a cane field as though it were a wheat field, cuts stalks, rips off leaves, pours the cane into tractor-drawn wagons. It would take 200 machete-swinging cane cutters to match its stride. . . .

"TRAVELING harbors" now moor Goodycar Tire and Rubber Company baby dirigibles. A tripod, adjustable to a height of eight to ten feet, is mounted on a three and one-half ton bus, which houses the ground crew. . . .

NORTHWEST Air Service, Inc., Seattle, sells advertising space on an aerial billboard, a banner 50 feet long, six feet wide, towed by airplane. . . .

DUBBED the world's largest steel casting, a 460,000-pound platen, or cylinder jacket, was cast recently by the Bethlehem Steel Company for its 14,000-ton forging press. Six open-hearth furnaces were used for the simultaneous melting of the metal. Poured in ten minutes, it required ten days to cool . . .

MAIL-ORDER automobile insurance is planned by Sears, Roebuck & Company through a new company chartered in Illinois. Farmers and small-town motorists will be chiefly solicited, and by mail only. . . .

SHOE laces would seem to be standardized if anything is. Yet even here change is at work. A new elastic lace is fixed permanently in the shoe with metal tabs. No knots need be tied, as the shoe can be slipped off or on without unlacing. . . .

TESTS in Jersey City indicate that fuel which now passes through motor-car cylinders unburned may be utilized. If commercially practical, the device may effect a saving of up to 75 per cent in fuel. . . .

BUTTERMILK biscuits, mixed, cut out and ready to bake, have been introduced in Louisville. Ten in a package, the housewife keeps them in the refrigerator until breakfast time, puts them in the oven for 10 to 15 minutes and they're ready to serve. . . .

A FLAME analyzer, developed by the Brown Instrument Company, measures, records, and automatically controls the

heating effect of any gas. Where rich gases must be diluted, or lean ones enriched, it makes possible automatic control of the mixture and insures a uniform product. . . .

TWO salesmen-actors are touring the country for the Plumbing and Heating Industries Bureau. They coach contractors in dramatized sales demonstrations, which are given by the contractor actors before contractors' meetings. . . .

BITUMINOUS coal is being converted into anthracite in a Chicago plant. Volatility is reduced from 36 to 12 per cent by the process. . . .



Two eight cylinder engines, developing 275 horsepower, drive this truck and its 20-ton load at speeds ranging up to 68 miles an hour



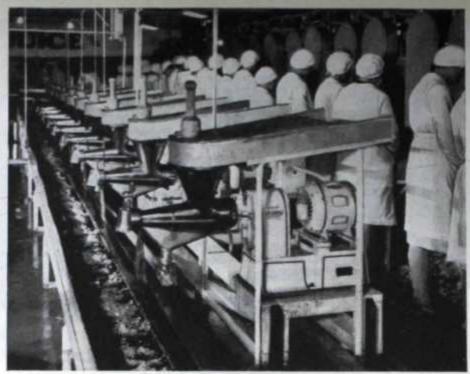
itting Your Business— Fitting Your Pocketbook

Reo fits your haulage requirements by constantly introducing new ideas in bodies. Theo fits your pocket-book with economies resulting from its quick acceleration and deceleration in traffic—with further economies resulting from its all-day, all-year, long-life stamina.

Carefully engineered, with friction and vibration reduced — made of finer metals, and the chassis balanced and free of excess dead weight, Reo is needed in your business for the most profitable haulage.

REO MOTOR CAR COMPANY, LANSING, MICH.

SPEED AND TRUCKS



Orange juice, extracted by these machines is frozen for shipment.

Conveyor belts carry off the discarded pulp and seeds

New Ideas Open an Orange Market

By CHARLES G. MULLER

N MARCH 25 in Erie, Pa., and on succeeding days in New York, Buffalo, New Haven and Cleveland, a new industry announced itself to American consumers. Householders, taking in their morning milk, found with it cartons of extracted orange juice which had come thousands of miles from the orange groves of Florida with all the freshness of fruit just picked from the tree.

Here is another instance of the rapid changes which industry is making in daily life by taking advantage of each latest discovery of science and of each new large-scale distribution idea.

The launching of this new method of orange juice distribution effects the grower by stabilizing prices and moving his crop; it provides steady jobs for southern workers; it develops another use for packages; it increases the use of refrigeration and refrigerated tank cars; it changes the daily habits and routes of the milkman who delivers the juice, and it more closely allies milk and orange juice on the national breakfast table.

The first shipment of the new product was ten refrigerator carloads of juice totalling 60,000 gallons squeezed from 2,500,000 oranges. What the opening of such a vast new orange market by new ideas rather than by more laws means to the citrus growers is indicated by Gov. Doyle E. Carlton who, visiting the plants of this new Florida industry said:

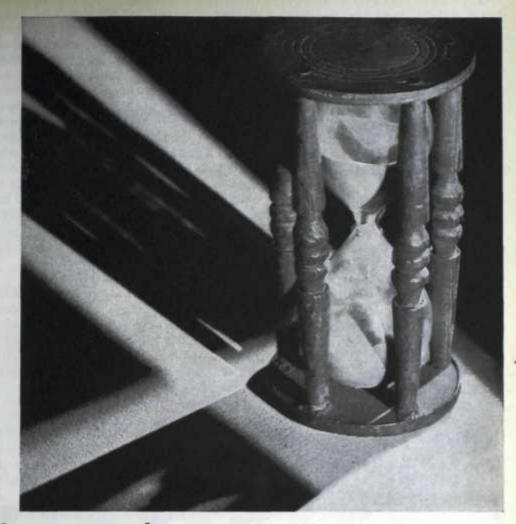
Simplifies distribution

"THE frozen orange juice business,I believe, is a definite step toward solving our greatest economic problem—getting our foodstuffs from the grower to the table of the consumer at reasonable cost.

It holds tremendous possibilities for the future."

A combination of many newly developed ideas made possible the plan to put extracted orange juice in the hands of the consumer. First came a growing appreciation in consumer minds that oranges are not a luxury suitable principally for juvenile stockings at Christmas time. The health value of oranges has been advertised so long and effectively that they have made their way into our general diet. Second, after a number of years of experimenting, new methods of vacuum packing were developed by which juice may be semi-

★ GETTING foodstuffs from the grower to the consumer at reasonable cost has been one of the greatest economic problems. Now, at least in the South, this problem is solved with the result that crops are moved, prices stabilized and steady jobs provided for workers. This was accomplished by an industry willing to forsake old practices for new



TIME the TESTER

writes another emphatic O. K.



ANY of America's leading products made their packaging ing debut with the help of Pneumatic Scale packaging machines. Today, the majority of America's leading packaged products, in every industry, are packaged by this method . . . Pneumatic's leadership is as old as packaging itself, and time has made it more emphatic, more complete.

In 1906, when Stickney and Poor, one of the country's oldest companies, started to package their products they bought their first Pneumatic machine . . . Since then, we have served them continually, and today, Pneumatic are the most universally used packaging machines in the spice field.

That is typical of the experience of Pneumatic Machines in practically every packaging industry. When the time comes for

your selection of packaging machinery, the reason for the universal choice of this system, as told by the users themselves, will prove valuable to you. It is contained in an unusual booklet, entitled, "An Interview." Write for it.

PNEUMATIC MACHINES

Carton Feeders—Bottom Sealers
—Lining Machines—Weighing
Machines (Net and Gross)—Top
Sealers — Wrapping Machines
(Tight and Wax)—Capping Machines — Labeling Machines —
Vacuum Filling Machines (for
liquids or semi-liquids)—Automatic Capping Machines—Automatic Cap Feeding Machines

Tea Ball Machines

Tea Ball Machines

DNEUMATIC SCALE ACKAGING MACHINERY PNEUMATIC SCALE CORP., LTD., NORFOLK DOWNS, MASS.

Branch offices in New York, 96 Contlands Street, Chicago, 360 North Michigan Avenue, San Francisco, 390 Market Street, Melbourne, Victoria, Sydney, N. S. W., and Tralalgar House, No. 9 Whitehall, London, England

frozen, sealed in special paraffined cartons, and then "hardened" at a temperature of ten degrees below zero to provide the distant consumer with genuinely fresh juice from tree-ripened oranges. Third, new methods of refrigeration and transportation provided the means to carry the juice across the entire United States. The fourth problem, how to deliver it economically to the consumer, was the most difficult.

Reduced distributing costs

ACCORDING to Thomas H. McInnerney, president of the National Dairy Products Corporation of which the National Juice Corporation is a division, the only way in which this juice could be delivered so that its cost to the housewife would be the same as, or less than, the cost of oranges which she herself would have to squeeze, was to use the established milk distribution set-up. The Borden's Farm Products Company, Inc., with an orange juice plant at Tampa, also is planning to deliver packaged orange juice to householders via its milk distribution facilities.

The tie-up was a natural one. Extracted orange juice is rapidly taking

its place with milk on the American breakfast menu. Delivered with the morning milk and cream on wagons and trucks already equipped for icing and so requiring no special apparatus, and distributed by the same man who delivers the daily milk, it would be possible to bring distribution costs down to the point where the plan was economically feasible. Tests of the juice as supplied to hospitals and hotels in gallon and six-gallon cans having proved successful, the National Juice Corporation set the last week in March as the time to make first consumer deliveries, planning to work up to approximately a dozen cities in a few weeks with extended distribution expected by June.

The plan for announcing the new idea to consumers and for supplying the juice via milkmen is simple and practical. Sales directors go to the cities where the plan is to be introduced. They talk with executives of the milk companies involved and-very important-with the route men who make the actual daily deliveries. After the aims and details have been explained, the milk drivers leave at the door of each regular customer a four-ounce sample carton of orange juice. Literature explaining to the householder what this new service means to her is left with an order blank. The next day regular deliveries are made. The plan also includes personal calls by the drivers as a follow-up on the sample and the literature. Backing this introduction is an intensive newspaper advertising presentation of the new idea, an educational effort to impress on customers the desirability of ordering the frozen juice for delivery 24 hours before it is to be used so that it may be thawed gradually in the home refrigerator to bring out the tree-fresh qualities of flavor and nutriment.

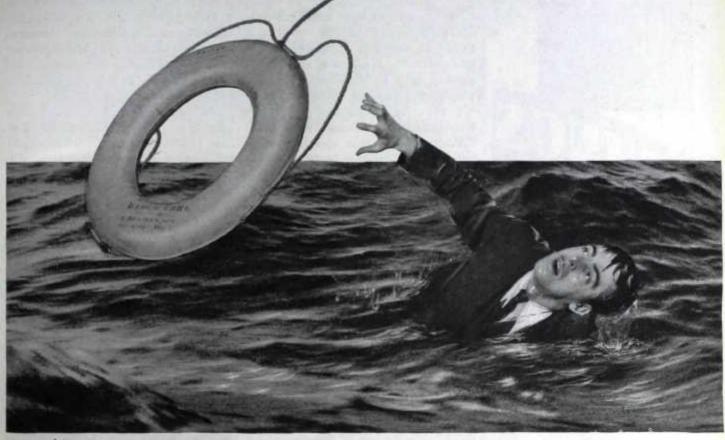
Reduced costs are possible

WHAT the eventual effect of this orange juice distribution via the established milk delivery system will be is yet to be determined. That the joint delivery of milk and orange juice may reduce costs of both, is possible. That it will increase the salary of milk drivers and their number as well, is probable. But that this new industry opens a large year-round market for the citrus grower's product and that it shows how business is ever reaching out for, and using, new ideas-are facts.



Semifrozen juices are stored in this room where, at a temperature of ten degrees below zero, they are hardened preparatory to shipment to northern breakfast tables

"It was a life preserver to our business—"



A certain manufacturer was suddenly faced with a grave problem. A company that had been performing a very essential process on a raw material that went into his product had gone out of business... The best price that he could get that same process performed anywhere else made his cost so high that he could not operate at a profit. He was face to face with the stark realization that he must develop a new manufacturing process — or go out of business.

In his search for the solution, he answered a Special Production Machines advertisement. In a short space of time, our engineers designed and built a machine that solved all his difficulties, saved his business and enabled him to complete his production in his own plant at a lower cost than ever before! The patents on the machine and process are his, safe for all time from competition. No wonder he says, "It was a life preserver to our business."

Yours may not be a problem of survival or failure. But perhaps we can help you, as we have helped many other companies in

all industries, to bigger profits through the development of machines to replace slow hand labor, through the redesigning of present machinery to eliminate waste or speed production. Write for more complete information. Special DUCTION MACHINES

of Division of PNEUMATIC SCALE CORPORATION, LIMITED

For over 40 years, Pneumatic Scale Corp., Ltd., has manufactured automatic labor-saving machinery for many of world's largest producers of merchandise

SPECIAL PRODUCTION MACHINES, NORFOLK DOWNS, MASSACHUSETTS

MINGS and a YEA GUARANTEE to guard

"PEP UP" your employes. Guard their health. Save their steps. Increase their productivity. Conserve that most valued asset—Time. Make working time worth more by installing General Electric Water Coolers, the low-cost way to a modern, convenient drinking supply.

Now these coolers bear a 3-Year Guarantee—an unsurpassed warranty made possible only by the performance records of that famous hermetically-sealed, self-oiled, quiet mechanism. Let the experience of many of the most critical buyers in business forecast your General Electric savings and earnings.

General Electric Co., Electric Refrigeration Department, Section CN 5, Hanna Bldg., 1400 Euclid Ave., Cleveland, Ohio. Join us in the General Electric Program, broadcast every Saturday evening, on a mation-wide N. B. C. metwork.

GENERAL ELECTRIC

WATER COOLERS

Commercial, Domestic and Apartment House Refrigerators, Electric Water Coolers and Milk Coolers



Selling a Public Liability for a Cash Consideration

N DECEMBER 15, 1930, citizens of Beach Haven, N. J., went to the polls to decide whether their municipal electric plant should be continued as a municipal enterprise or be sold to private interests. When the votes were counted, only 10 were found to favor continued municipal operation, while 271 were for selling the plant. The events leading to such an overwhelming majority for private operation of a utility have interesting implications for even the most casual student of government in business.

Beach Haven, a popular summer resort, inaugurated electric service with its municipally owned plant in 1922. New equipment was added in 1925, and with a 17-cent rate for residential lighting the plant was making money.

More equipment was needed before another three years had passed, but the town had reached the legal limit of its bonded indebtedness and had no funds. Finally, in 1928, a court order was obtained authorizing a special \$40,000 bond issue.

Meanwhile, a private corporation, the Atlantic City Electric Company, had been pushing its lines northward and by 1928 was serving Beach Haven's neighboring communities with its standard suburban rate of 11 cents. Public demand forced Beach Haven authorities to reduce their rates to a like figure. The borough administration contended that this rate still permitted a profit, but many citizens doubted.

A business administration

A STRENUOUS mayoralty campaign in 1929 put a group of successful business men in the mayor's and councilmen's chairs. One of the new administration's first acts was to have the electric department's accounts audited. From the accountants' figures they prepared a report that showed the municipal plant was actually losing money. In 1930, with the municipal plant needing further new equipment, negotiations were begun with the Atlantic City Electric Company for sale of the property. Impetus was lent by another voluntary rate reduction by that Company. A special election to decide the matter was authorized, and a report was prepared by the city administration on the proposal. It showed that \$12,694.48 would be saved to the people yearly under private operation and that the municipal plant was inadequate. Difficulties of financing extensions were also pointed out, as well as the inherent difficulties of municipal management.

"No municipality is a perfect manager of business," the report stated in part. "First, the positions are inevitably subject to political control or consideration... Second, the interlocking operation of different utilities complicates bookkeeping and management. Third, lack of flexible financing. The Borough Council has been prevented many times from following the best business practices because of difficulties in financing operations. With the best intentions in the world the Borough Government cannot compete with an organization in service to the public.

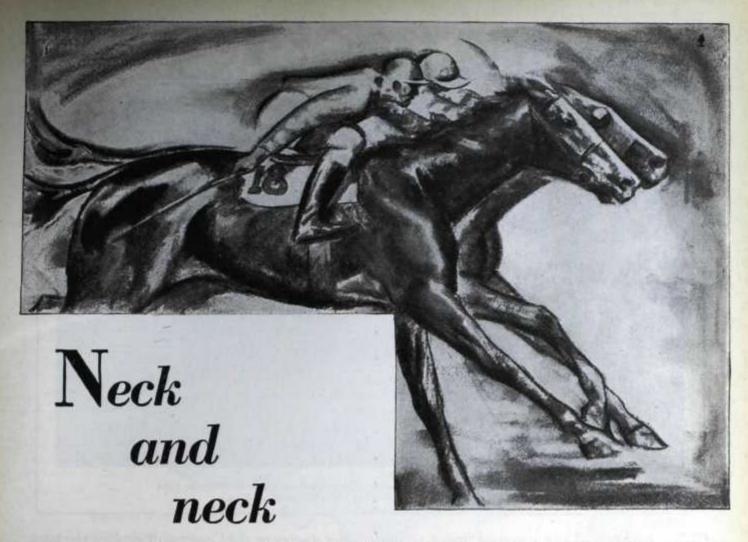
Advantages to be gained

"A COMPANY will provide an office with competent clerks, experts to advise users of current as to the most efficient and economical methods, an adequate repair service. It will show a readiness to extend lines and to furnish necessary equipment. It will have a system of deposit payments that will protect the landlord. It will be free from political or 'friendly' influences and thus be enabled to conduct the office on strictly business principles. . . .

"The Borough will be relieved of billing and collecting, disputes as to current used, selling properties for unpaid bills and a lot of bookkeeping and reports."

"We sold our plant to the highest bidder for about what it cost us," Mayor Charles Cramer said following the election. "In the future our citizens will have all their requirements for electric service furnished promptly, without the delay and uncertainty which always goes with any municipal operation.

"All these factors being as they are, I, for one, would have been willing to give the municipal plant away free, and would still have felt that we were getting the better of the bargain. As it is, we have disposed of a liability for a substantial cash consideration."—J. B.



against COMPETITION

NIP and tuck against a field of speedy rivals . . . it's FLASH that counts today! A day saved in a price change announcement—thousands of dollars gained! Hours ahead with a new policy—thousands of customers swung into line!



"Let's tell them with a Multigraph campaign." Idea at one p. m. —proof O. K. at two-thirty—letters in the mail at five-thirty p.m. that's a fair sample of the way many a sales and advertising executive is beating competition today... reaching preferred prospects promptly with individualized selling material.

Rapid typesetting—rapid printing or typewriter reproduction rapid addressing—rapid folding the Multigraph line includes COM- PLETE equipment for swift action in reaching customers, salesmen, dealers, jobbers, or branches.

Ask any Multigraph representative to tell you how leading national advertisers are increasing the effectiveness of their appropriations by using Multigraph equipment for modern selective selling.

The American Multigraph Sales Co. 1830 East 40th Street Cleveland, Ohio

The Multigraph Sales Co., Limited 137 Wellington St., W. Toronto, Ontario (Or consult your telephone directory)

get your extra speed with

The MULTIGRAPH

With speed and economy the Addressing Multigraph writes the letter, fills in an exactly matched name, address and salutation, completes it with a consineingly personal signature and addresses the concluse.

Waiting for the Stork



Life Publishing Company has graciously permitted this reproduction of William Balfour-Ker's "The Hurry Call", first printed in LIFE, December 3rd, 1904.

THE nation will pay a special honor to its mothers on May tenth. Presents and tokens of family love will make Mother's Day memorable.

But while more than 2,000,000 women passed safely through childbirth last year, 16,000 died. More than 10,000 of these women might have been saved if they had received proper prenatal and maternity care and skilful assistance. What was not done for them, however, can be done for prospective mothers.

The one way and the only way that a woman can escape some of the hazards of motherhood is to consult a doctor skilled in maternity cases immediately after she receives her first message from the stork, promising a most precious gift.

Or if, for financial reasons, she is unable to consult a physician, she will probably find in most progressive communities a Maternity Center where she will be given sympathetic and expert guidance. She may be told that she needs a change of diet, or more rest. She may require immediate medical or surgical care.

Her doctor or the Center will explain the laws of nature which she must obey in order to avoid needless suffering—perhapstragedy. And she will be given necessary instructions for

safeguarding her baby as well as herself.

Every woman who is to become a mother should have an early physical examination, including a blood pressure test and other tests invariably given in the great institutions which are teaching the world how to avoid dangers and anxieties formerly considered inevitable. These institutions have proved that modern scientific attention will reduce the deathrate among mothers more than two-thirds.

The mother-to-be should remain under her doctor's care, or under the guidance of the Maternity Center, until the stork has kept his promise and this happy message can be sent out—"Mother and child are doing well".

The Metropolitan Life Insurance Company will gladly mail free; Information for Expectant Mothers", and a booklet describing the work done at a well-conducted Maternity Center. Ask for Booklets 531-U.



METROPOLITAN LIFE INSURANCE COMPANY

FREDERICK H. ECKER, PRESIDENT

ONE MADISON AVE., NEW YORK, N. Y.

O

The Map of the Nation's Business

By FRANK GREENE

Managing Editor, Bradstreet's



A NUMBER of favorable features became apparent in trade and industry as the first quarter of 1931 ended, leading to a feeling that the long retreat was about halted and that in some sectors advances were made

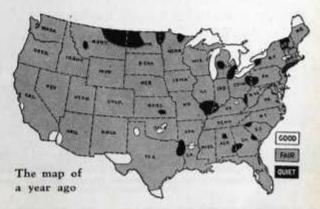
ESPITE an increased degree of irregularity, evidences multiply that progress was made during March and the first quarter of the year. Standing out in the month's events on the unfavorable side was the reaction in the stock market, this foreshadowing or accompanying poor dividend showings. Corporations whose payments were reduced or passed entirely were in the proportion of two to one of those that were maintained or increased.

Bond prices were shaded and stock and bond sales on the exchanges declined from last year although bonds gained over their level of two years ago.

Foreign trade declined all around, most seriously in those lines in which price regulation was most manifest. Wheat shipments in the form of the grain practically disappeared from the export list, while this and other grains dropped to price levels not seen for two decades past.

Income-tax collections, reflecting the slump of 1930, fell off, while past and present free spending resulted in a Treasury deficit, a stranger for many years to government finance. Cuts in wages involving many thousands of employees were reported by the United States Department of Labor. The





The index of commodity prices as of March 1 was slightly higher than that for February 1, the first advance it has shown for 18 months



This Giant Coal Car Dumper Loads 120 Tons a Minute

If you should be near Toledo, Ohio, when the lake season is open, you would wonder what happens to the long trains of heavily loaded coal cars which draw steadily into the new Presque Isle dock of the Chesapeake and Ohio Railway. Let us stop for a moment and find out.

Towering over the boats being loaded at the water's edge stand two Industrial Brownhoist electric high-lift car dumpers, like the one shown above. Now watch one of them pick up a car holding 120 tons of coal, rotate and dump it and place it back empty on the track. Each dumper will complete a cycle a minute, the boats being quickly loaded for up the lakes.

The tremendous savings in the above operation are obvious, but proportional economies are being made by Industrial Brownhoist cranes in nearly every line of industry. You have only to call in our nearby representative to learn whether these economies can be applied to your own handling work.

Industrial Brownhoist Corporation, General Offices, Cleveland, Ohio
District Offices: New York, Philadelphia, Pittsburgh, Detroit, Chicago, San Francisco, New Orleans
Plants: Brownhoist Division, Cleveland, Ohio; Industrial Division, Bay City, Michigan;
Elyria Foundry Division, Elyria, Ohio

INDUSTRIAL BROWNHOIST

census calculations of idleness, ranging from 6,000,000 to 8,000,000 persons, were proof that earlier optimistic totals had also been scrapped.

Despite all this, there was visible a number of favorable features. Trade expanded during the month of March and industry increased, although in some cases perhaps less than was seasonal. On the other hand there was evidence that this year the trend was onward and upward, whereas a year ago ground was definitely lost. One development in this direction was the practical proof, adducible from reports as to volume versus value of units, that a larger business was being done in final distributive trade this year than last although financial returns were smaller. Then too, the statement of the Farm Board that it had no present intention of regulating prices of the new wheat crop, while temporarily depressing to prices, seemed to hold within it a promise of saner things to follow. Other favorable features were:

Tacit agreements as regards excessive production of petroleum;

Favorable activities increase

THE appearance of some large constructive plans for building and other heavy construction, this involving record-breaking orders for structural steel;

The reopening of a large number of suspended banks;

The breaking by repeated falls of rain and snow of the year-long drouth;

A smaller number of large failures despite a record number of all suspensions;

A smaller total of fire losses;

Early progress of farm work:

An earlier opening of lake navigation than last year, with all that this implies as to opportunities for work for the idle;

Reports of increased activity in cotton, wool and silk mills;

A rather distinct tendency for the downward curve of commodity prices to flatten out, possibly the harbinger of the end of the eighteen-months decline.

Thus at the end of the quarter, while the ground gained seemed small, still there was apparent a feeling that the long retreat was about ended and that some units of the army of trade and industry had faced about and were actually advancing.

Some contrasts between some of the statistical data evolved over the quarter are worth noting. The stock market, for instance, judging by the averages, lost in March about all the gain in railway stocks that had been scored in the preceding two months. The industrial stocks did relatively better but still lost over



Farms

WOULD WASTE AND PEOPLE HUNGER WERE IT NOT FOR

RAILROAD TRANSPORTATION . .

The riches of a thousand fields and farms would perish while people hungered, were it not for railroad transportation. Trainloads after trainloads come to our great cities daily, bringing the essentials of life to millions of our population.

And in our complete dependence upon railroad transportation, we depend upon the General American Tank Car Corporation . . . transportation's foremost aid.

During the past thirty-two years, General American has built thousands of freight cars. They range from cars that carry molten metal to cars that carry chlorine and helium gas . . . giant cars weighing one hundred tons each, and little midgets for interplant hauling.

In addition to building all kinds of freight cars, General American operates the largest privately owned freight car line in the world. It also maintains a large export terminal for the handling of bulk liquids, and a complete European freight transportation system.

No matter what your product, you should investigate shipping it in bulk in a General American car. Address, 230 South Clark Street, Chicago, Illinois.



GENERAL AMERICAN TANK CAR CORPORATION

"In the distribution of our products, such as Karo, Mazola, Argo Starch, Linit, Cerelose and Argo Sugar, we find the public merchandise ware-houses offer us a wonderful opportunity for distribution. In the United States we use approximately 270 warehouses in 40 states. This in itself shows conclusively the regard in which we hold the warehouse as an agency of distribution."

R. R. Seberry,
Warehouse Department
CORN PRODUCTS REFINING
COMPANY



AWA Warehouses Be YOUR Branch Houses In 189 Cities . . .

In 189 cities of the United States, Canada, Cuba and Hawaii, our member warehouses receive merchandise in carload or less-thancarload lots... store it until needed by wholesalers, dealers or users... then deliver it where it is wanted. In effect these warehouses become your branch house in each city you select... storing and distributing your goods.... receiving your mail and handling your orders... doing your billing and receiving your remittances if you wish... keeping in touch with you through daily stock reports.

Using the warehouse 'phone number, you may list your name in each local 'phone book, and the warehouse operator will take your salesmen's calls. Yet your identity is carefully preserved, for the warehouse can use your labels, your billheads, your stationery or any of your personalized forms.

Charges are made on a "piece work" basis. Your costs are based on the number of units of your goods that are handled. During dull periods you are not burdened with fixed overhead expenses, as

you are if you operate your own branch houses. The AWA Plan cuts distribution costs, saves freightcharges, speeds delivery, enables you to increase sales through the strategic location of spot stocks. Full details in our 32-page booklet, sent free an request.



WAREHOUSEMEN'S ASSOCIATION

1867 Adams-Franklin Bldg., Chicago, Ill.

half of the January and February gains in that list. Domestic bonds lost a full point in March and were at the lowest point of the quarter. Foreign bonds did better and the capacity for absorption of new issues was shown in the doubling of state and municipal sales for the month. The fifty per cent increase in sales for the quarter was encouraging.

Among the leading features in February and March in the merchandising line were the large volume of sales of cotton goods and the advances in prices of most varieties of staple cottons, especially in unfinished lines. Some print cloths sold as far ahead as the third quarter of the year, broadcloths sold similarly and prices were advanced in denims, tickings, printed goods and blankets. Cotton duck was dull and tire fabrics were inactive except in companyowned mills. Raw-cotton prices moved counter to the goods market, going lower in March and early April while sales of goods quieted down late in the same month.

The mainspring of the strength in cotton goods was the agreement reached to eliminate women and children from night work and the bullish statements issued by the Cotton Textile Merchants Association indicating active operations and sales, decreased stocks, and increased unfilled orders.

Significant features of the wool and woolen-goods line of late have been the gains in consumption based on increased mill operations, notably in wide looms and woolen spindles, and the increase of 13.4 per cent in February raw-wool consumption over January and a small fraction of one per cent gain over February 1929. London wool prices at the March sales showed advances of 15 to

BUSINESS INDICATORS

Latest Month of 1931 and the Same Month of 1930 and 1929 Compared with the Same Month of 1928

	Latest Month Available	Some Month 1925 - 100 C		
Production and Mill Consumption Pig Iron Steel Ingots Copper—Mine (U. S.) Zinc—Primary Coal—Bituminous Petroleum	March March February March March*	64 70 73 58 77 93	101 99 91 85 83 104	116 117 130 99 91 111
Electrical Energy Cotton Consumption Automobiles Rubber Tires Cement—Portland	February March* January February	76 70 67 70	115 86 100 80 96	112 104 148 113 100
Construction Contracts Awarded—37 States—Dollar Values Contracts Awarded—37 States—Square Feet	March March	65 45	80 63	85 92
Factory Employment (U. S.) F. R. B. Factory Pay Roll (U. S.) F. R. B. Wages—Per Capita (N. Y.)	February February February	81 73 94	97 97 101	104 107 103
Freight Car Loadings Gross Operating Revenues Net Operating Income	February	77 74 39	93 94 85	100 104 121
Trade—Domestic Bank Debits—New York City Bank Debits—Outside Business Failures—Number Business Failures—Liabilities Department Store Sales—F. R. B. Five and Ten Cent Store Sales—4 Chains Mail Order House Sales—2 Houses	March March March March February March	62 77 116 110 92 102 103	91 97 106 104 101 105 115	124 106 89 66 103 114 128
Trade—Foreign Exports Imports		60 50	94 80	119
Finance Stock Prices—30 Industrials Stock Prices—20 Railroads Number of Shares Traded Bond Prices—40 Bonds Value of Bonds Sold New Corporate Capital Issues—Domestic Interest Rates—Commercial Paper, 4-6	March March March March	89 74 79 97 78 69	136 111 117 96 111 122	153 111 139 96 68 139
Wholesale Prices	March	61	100	137
U. S. Bureau of Labor Statistics Bradstreet's Fisher's	February March March	78 69 78	96 83 93	100 96 101
Retail Purchasing Power, 1923=100%		78 93 101 1923=100% Feb. Feb. 1931 1930		
Purchasing Power of the Retail Dollar Purchasing Power of the Clothing Dollar Purchasing Power of the Food Dollar Purchasing Power of the Rent Dollar		112 118 115 117	102 104 96 110	
X Excludes Boston, Cleveland, Chicago, Los Angeles,		La Contract		New

X Excludes Boston, Cleveland, Chicago, Los Angeles, Phila., Detroit, San Fran., and New York.

* Preliminary.

Prepared for Nation's Business by General Statistical Division, Western Electric Co.



This new tube prevents 95% of all flats, and adds miles of life to your tires.

SUPPOSE this were one of your trucks. A ten-penny nail has just gone clear through both tire and tube. Change Tires? Delay? Expense? No indeed. The driver will simply pull out the nail and go on his way.

There's no flat tire, no leakage of air because the truck is equipped with Firestone Puncture-Proof Tubes.

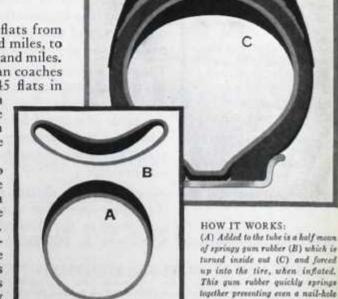
Firestone Puncture-Proof Tubes are not an experiment. They are making expensive delays a thing of the past for hundreds of truck owners. Just two instances:

On more than 1500 vehicles, operating in 12 different cities, Firestone Puncture-Proof Tubes reduced the number of flats from one in each two thousand miles, to

one in each twenty thousand miles.
Tests made on 34 urban coaches showed a total of only 45 flats in

three and a half million tire miles, or an average of only one flat in each eighty thousand tire miles.

It will pay you to phone your Firestone dealer today. Ask him to show you a Firestone Puncture-Proof Tube. Specify Firestone Gum-Dipped Tires, Firestone Puncture-Proof Tubes and Firestone Rims when you purchase new equipment.

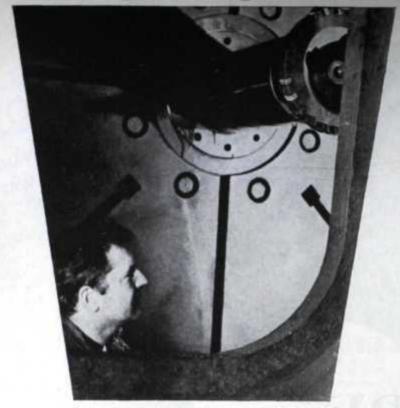


PUNCTURE PROOF TUBES

from causing leakage of air.

TIRES . TUBES . BATTERIES . RIMS . BRAKE LINING . ACCESSORIES

Turning Engineering Dreams into



REALITIES

PUMPS All Sites... All Types For All Services Any Capacity... Any Pressure COMPRESSORS Stationary and Portable CONDENSERS and Auxiliaries DIESEL ENGINES GAS ENGINES FEEDWATER HEATERS WATER, OIL and GASOLINE METERS MULTI-V-DRIVES ROCK DRILLS AUTOMATIC HEAT TREATING MACHINES FOR DRILL STEEL FORGING FURNACES FOR DRILL STEEL DRILL STEEL ACCESSORIES CHROMIUM PLATING S

Literature on request

ATLANTA

WHEREVER men dream dreams of progress ... wherever visions of greater human comfort, convenience and happiness are seen ... there the engineer is found. His function is to make dreams come true.

But to express these dreams in tangible bronze and iron and steel ... to turn the engineer's plans into actual working mechanisms . . . calls for a manufacturing organization that understands the objectives, and that possesses the necessary experience and physical facilities.

Through a period of ninety years, Worthington has carefully built up an organization of recognized engineering talent, capable of interpreting the needs of selected fields in industry ... paralleled by a manufacturing structure equipped to translate those interpretations into reliable equipment.

Worthington's ability to serve is projected through twenty-four district offices and representatives in the United States and through affiliations in the leading cities of the world. 25 per cent over February, according to press cables. The third of the great textiles, silk, witnessed a gain of 8.8 per cent in March over March a year ago with an increase of 4.4 per cent for the quarter in approximate deliveries to American mills and a gain of eight per cent over the same quarter of 1929.

Following the relief shown in the wheat trade at the feeling that the Farm Board and its affiliates would not carry their operations into the new or 1931 wheat crop has come the natural question as to what is to be done with the "corpse" of the 1930 crop and what, if any, there is left of the 1929 crop. This "corpse" is said to exceed 200,000,000 bushels. Point is added to the question by the knowledge that the stock of wheat in all positions in this country on March 1 was 450,000,000 bushels, as against 390,000,000 bushels last year: that estimates of the new winter wheat crop point to 600,000,000 to 625,000,000 bushels, and that the spring wheat area, even allowing for a decrease of 3,000,000 acres in the indicated planting, promises a possible yield of 250,000,000 bushels.

Clearings show no trend

BANK clearings and bank debits fail to show much of value as to trade trends. For the month of March and the first quarter the decreases in clearings were 23.9 and 21.7 per cent respectively while bank debits decreased 26.4 and 26.6 per cent. Some of this represents reduced stock and bond dealings, which fell respectively 32.1 and 30 per cent from March a year ago and 24.3 and 8.1 per cent from the first quarter of 1930.

Failures and fire losses have often been coupled in discussing ebb and flow movements in business. March failures increased 14.8 per cent and liabilities 14.5 per cent over last year, while for the three-months period the increases over a year ago were 17.8 and 60 per cent, respectively. Failures for the first quarter numbered 7,724 and liabilities totalled \$394,535,630, new high records for those periods. Liabilities for March were the lightest since last October.

The number of banks suspending has dropped off greatly, and the inference is that the future holds promise of a smaller number of large suspensions of any kind. Failures, by the way, averaged 100 daily in January, 80 daily in February and 75 daily in March.

Fire losses for February fell 3.3 per cent below those of February a year ago and for two months of the calendar year showed a third of one per cent increase over the similar period of 1930.

Cotton exports, one of the few lines of

WORTHINGTON PUMP AND MACHINERY CORPORATION

Works: Harrison, N. J. Cincinnati, Obio Buffalo, N.Y. Holyake, Mass.

Executive Offices: 2 Park Avenue, New York, N.Y.

GENERAL OFFICES: HARRISON, N. J.

CHICAGO DALLAS EL PASO LOS ANGRES PHILADRIPHIA ST. PAUL SEATTLE CINCINNATI DENVER HOURON NEW OBLEANS PITTSBURGH SALY LAKE CITY TULIS CREVELAND DETROIT EANEASCITY NEW YORK ST. LOUIS SAN PRANCISCO WASHINGTON Branch Offices or Representatives in Principal Cities of all Foreign Countries

Burroughs electric calculator



More Production Per Operator

Electric operation and a light, uniform touch for all keys provide speed and ease that result in an increased output for each individual operator. Let us demonstrate the Burroughs Electric Calculator on your own work.

Burroughs Adding Machine Co., 6225 Second Blvd., Detroit, Mich.

February of 1930.

exports to improve for February, showed a gain of 7.7 per cent in quantity over

Exports of manufactures are 37 per cent off for the first two months of this

Bradstreet's Index of Commodity Prices as of March 1, \$9.2291, showed a

year from the like period of 1930 while all exports are 35 per cent off for February and 37 per cent below 1930 for

the first two months of the year.

"Made by Hammermill?"

-that's enough for me to know

When you can have a lower-priced bond paper made by men* who know how to make paper to scientific standards of quality —why take chances with uncertain brands?

Look for the watermark, "Management Bond—a Hammermill Product," That's your guarantee of satisfaction.

Eight colors and white, in the full range of usual commercial weights. Your printer stocks Management Bond, or can get it for you promptly. Mail coupon for portfolio. small increase, six-tenths of one per cent over the index number of the month before. This was the first advance reported since October 1, 1929, 18 months ago. Live stock, provisions, fruits, hides and leather accounted for the advance. Textiles, coal, coke, and naval stores changed little while metals, oils, building materials, chemicals, drugs and miscellaneous products declined. The index number this year closely approximates the num-

Carloadings for March saw a steady rise week by week which may or may not have been a reflection of an earlier Easter but which certainly caused a slightly more cheerful feeling.

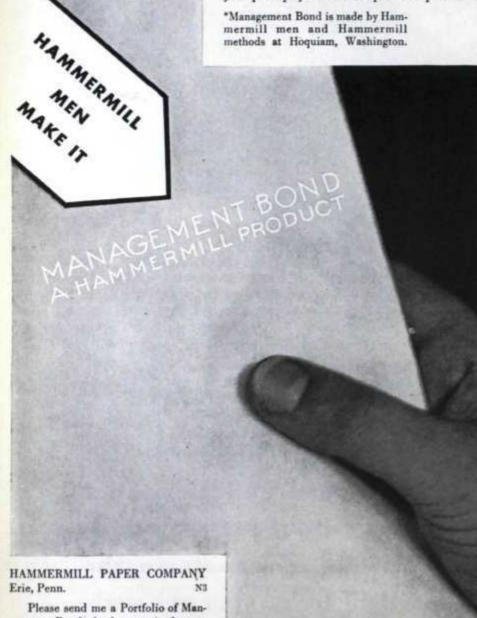
ber on January 1, 1910, \$9.2310.

Steel production is up

DESPITE the slowing down in percentage of active capacity reported in the latter part of March, steel production showed a really good step forward, the total output of 3,023,440 tons being 19.6 per cent ahead of the short month of February and the largest since last August although 29 per cent below March a year ago. The daily average production in March rose to 116,286 tons, as against 105,305 tons in February, 91,971 tons in January and only 77,322 in December 1930. The daily average in March last year was 165,391 tons when the percentage of operations was 82.60 as against 54.74 in March this year and 38.57 per cent in December last. For the first quarter steel production was 8,033,000 tons, a decrease of 34 per cent from a year ago.

Signs of a gain in building over last year have been visible at New York each month this year, but the gain of \$24,000-000 or 26 per cent over 1930 for the quarter is not sufficient to offset declines shown in January and February in the country outside of New York. The decrease at the outside cities from a year ago for the quarter was 23 per cent and at all cities including New York was 12 per cent.

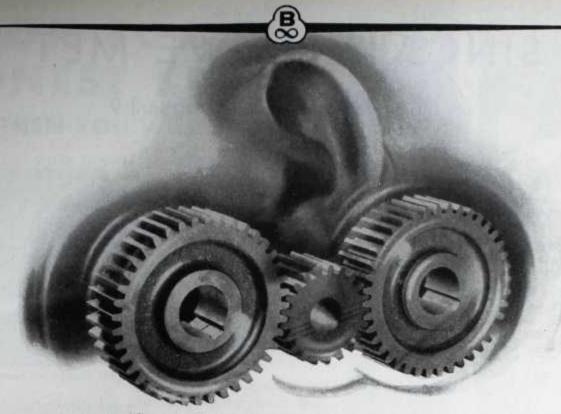
The trend of chain-store sales in March was irregular. The two biggest mail-order houses reported decreases from last year of 6.8 and 14.7 per cent whereas a number of other chains reported a combined decrease of five per cent.



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The ear approves the hush of Bakelite Laminated Gears







In some machines gear noises are intolerable; in all types of machinery they are a serious nuisance. Noisy gears hinder sales—quiet gears help them. Gear trains that become increasingly noisy with use breed dissatisfaction - gear trains that are lastingly quiet breed good-will.

Gear driven machines and devices of almost every kind are made quieter in operation, and more satisfactory in service through the use of

Bakelite Laminated intermediate gears or pinions. These non-metallic gears eliminate metal to metal contact and its attendant noise, minimize gear tooth wear, and lengthen the pe-riod of efficient operation. 42L, most informative. 42L, "Bakelite Laminated".



42L, most informative.

Quiet operation is but one advantage of Bakelite Laminated gears. Being non-hygroscopic, they neither shrink nor swell. They are unharmed by contact with oils and most acids, are non-corrodible, resistant to electrolytic action and to both heat and cold.

The tiny gears in a speedometer, where accuracy is essential, are made of Bakelite Laminated, and drive gears on the heavy rolls in a steel mill where great strength is required are made

of the same material. We invite all those interested in the designing, building and operation of machinery to consult our engineers about silent gear operation,







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247 Park Avenue, New York, N.Y. Chicago Office: 635 W. 22nd Street BAKELITE CORP. OF CANADA, LTD., 163 Dufferin St., Toronto, Ont.

BAKELITE

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THE MATERIAL OF A THOUSAND USES

SINCE LAST WE MET

A Business Record March 9 to April 9

MARCH

9 · PITTSBURGH Coal Company, largest bituminous producer, reports 1930 net loss of \$1,078,696 against small profit in 1929.

EMPLOYMENT picking up in New England, Southeast and Southwest, says Emergency Committee on Employment.

NATIONAL Dairy Products reports record net of \$25,470,000 for 1930.

- 10 · NEW YORK Central and Pennsylvania Railroad float bond issues of \$75,000,000 and \$50,000,000 respectively. Brokers describe move as vote of confidence in stability of bond market.
- 11 · ATLANTIC Coast Line lost \$6,500,000 last year because of motor-truck competition, J. W. Perrin, freight traffic manager, tells I. C. C.

INCOME of Class I railroads for January down nearly 40 per cent under last year.

- 13 · CHELSEA Bank and Trust of New York to reopen in 30 days as Mercantile Bank and Trust.
- 14 · BANK of New York, oldest bank with original name, celebrates 147th birthday. Alexander Hamilton was first president.
- 15 · 504 PERSONS paid tax on incomes over a million in 1929. Revenue Bureau reports there were 511 in 1928.

ALL-STATE Insurance Company formed by Sears-Roebuck officials to deal in automobile, health and accident insurance. The shadow of mail-order life insurance?

16 · U. S. STEEL total sales were \$1,180,000,000 in 1930, off 21 per cent.

DEPARTMENT of Commerce computes U. S. Loans to foreign nations at nearly a billion, exceeding English loans by a third.

GENERAL Motors adds new group life insurance plan bringing total to half billion. Through the Metropolitan. Largest insurance transaction since 1928.

FAVORABLE developments in India raised silver prices to 31½ cents an ounce, high for year.

ELECTRIC Bond and Share enjoys record year in 1930 with net of \$42,333,000.

17 · KIDDER, Peabody and Company banking house, started in 1865, dissolved. Succeeded by new partnership to continue under same name.

18 · GENERAL Electric nets \$57,-490,000 in 1930 against \$67,289,000 in 1929.

LARGEST steel order ever placed—125,-000 tons. John D. Rockefeller buys for Radio City from U. S. Steel.

21 · MINORITY stockholders charge Bethlehem Steel officials conceal huge bonuses.

SECRETARY Lamont places number of unemployed at 6,050,000.

LARGEST South American corporation formed, the Chile Nitrates Company, at Santiago, Chile. \$375,000,000 capital.

GERMANY and Austria join in customs

FARM BOARD announces wheat buying ends with 1930 crop.

- 92 · NATIONAL Industrial Conference Board estimates national income at \$84,000,000,000; national wealth \$361,800,000,000. Per capita income \$692; per capita wealth, \$2,977.
- 23 · PACKERS' Consent case to go to Supreme Court.
- 25 · BOSTON and Maine security holders asked to influence freight routings over that road.
- 26 · B & O., ANACONDA, and Westinghouse E. & M. cut dividends. Desire to maintain employment cited as one reason by railroad.

MORGAN group lends Spain \$60,000,000.

RAIL price-fixing charges to be reviewed by Department of Justice, involving leading steel companies.

29 · DISSOLUTION of Sugar Institute asked by Department of Justice. Pricefixing charged.

CUTS in wheat crop slight, Department of Agriculture survey predicts.

TOTAL expenditure for federal, state and local government put at \$12,609,000,000 by Industrial Conference Board.

CUNARD Steamship profits slump from \$3,955,000 in 1929 to \$93,000.

BETHLEHEM STEEL net in 1929 was \$42,242,000. In 1930 \$23,843,000.

30 · TRADE practice rules for 80 industries revised further by Federal Trade Commission. 31 · R. H. MACY parent store sales for 1930, 899,130,000.

APRIL

- 1 · HOLLAND TUNNEL and Hudson River Bridge insured against damage, or "Act of God," for \$30,000,000 and \$25,-000,000 respectively.
- 2 · LIBERTY, weekly magazine, purchased by McFadden Publications.

DEFICIT of \$800,000,000 looms for end of Government's fiscal year.

\$24,512,000 drought aid loans approved to date.

GENERAL MOTORS shows drop in sales from \$1,500,000,000 in 1929 to \$980,000,000 in 1930. Cash and securities gain while inventories drop.

GEORGE A. SLOAN, President Cotton Textile Institute, says 92 per cent of the mills which agreed to end night work by women and minors have put that policy into effect.

3 · AVIATION CORPORATION net loss, \$4,703,600.

ALUMINUM COMPANY earns \$1.92 against 1929 figure of \$11.18.

4.541 DIVIDENDS reduced or omitted for first quarter. 252 increases or extras. Reductions come at end of depressions, financiers hold.

INCREASES in cigar and tobacco prices announced by United Cigar Stores. Cigarette boost also predicted.

VETERANS' loans to reach billion, Brig. Gen. Hines tells President.

 6 · EMPRESS OF BRITAIN, 42,500 ton Canadian Pacific ship launched at Glasgow.

EXPORTS of farm products drop \$408,-000,000 in first two-thirds of fiscal year.

- 7 TREASURY offers \$275,000,000 in 1½ eight-month certificates—Bond issue expected.
- A. & P. DID a gross of \$1,065,000,000 in 1930, increase of 12 million over 1929.

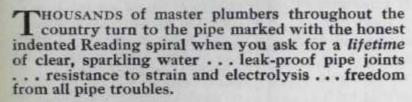
NEW YORK STATE borrows \$35,000,000 at 3.4645. Lowest rate in 25 years.

9 TWENTY New York banks with assets exceeding hundred million to merge.

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For they know that no other pipe material can match the record of endurance which Genuine Puddled Iron has built up in every type of installation. That's why, through four generations, plumbers and heating contractors have recommended Reading Pipe for houses, office buildings and industrial plants . . . wherever water, oils, gases or wastes must be piped safely and at low cost.

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THE most essential characteristic of management is organization. If management is right its organization is right. No need to go further to find the qualities that make for success.

Personality shows on the surface. Spirit and morale can not be hidden. Every detail of business transactions expresses their presence, or their absence.

No greater tragedy in business life than the failure of able, honest and potentially successful men. Modern Accountancy sees these failures often and emphasizes them as quite unnecessary. Success is not to the superman alone. Most often it comes from a right concept of organization and the application of a well-ordered plan. Every day, normal business intelligence discovers, and understands better these truths; and so is achieving more fully the results that mark good management.

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Beauharnois Power Corporation Limited MONTREAL CANADA

A Consumer Looks at Retailers

By R. CARL MOORE

Y COMMUNITY is probably typical of others in this part of the South. It is both agricultural and manufacturing, and there are a number of villages centering around a city of some 50,000 population. At present this district is the scene of a battle royal between the advancing chain stores and the thoroughly aroused independent merchants, especially the grocers. There have been heated massmeetings addressed by local politicians, the radio has broken into fervent denunciations of the chains, antichain pamphlets have been circulated.

It is not my purpose to discuss the opposing arguments in detail; I am interested in the battle only in so far as it may benefit me ultimately. I merely wish to speak briefly of some of the arguments now being heard.

A town where prices talk

MOST of the people of this district are either laborers or small farmers. The regular wage of unskilled white labor is \$2.50 per day, and the wage for negro labor is even lower. With a monthly income of somewhere around \$60, the average man is apt to view coldly the plea of the independent merchant that he, being a native, is entitled to patronage before the chain-store operator, although the latter's prices may be 20 per cent lower in some instances. The independent would get the trade in most cases if prices were nearly equal and other factors were not against him, but when his prices are out of proportion, his complaint to those poorer than himself is too much like passing the hat.

Also, I have observed that many local merchants did not need the chain store to eliminate them from business. There were many business failures and only a few outstanding successes before the chains entered this field. The methods of many independents in this district have been decidedly slipshod. Credit has been extended where it should not have been, with consequent losses. Prices have been boosted to cover those losses, with the cash customer paying the bill.

Another factor in favor of the chains is their clean stores. Many local mer-

Age is importantwhen viewed from suc h a reco

IGE in a business house is valuable only when measured in terms of experience.

Years alone mean little. But if those years include periods of prosperity and depression, and if the company's record has continually been one of progress; then they furnish indisputable proof of sound fundamentals, thorough-going fairness in all dealings, and safe stability.

And in such a record lies indication of future growth.

The Agricultural Insurance Company is one of the older companies. Founded in 1853, it has lived through civil and international wars-with their attendant financial crises. Through periods of every sort of panic and prosperity, this company has maintained basic fundamentals of operation which have brought steady progress.

As an infant the Agricultural was most interested in farm properties. Today farm business is only a minor portion of its total volume. The company has enlarged its activities and now supplies every form of property insurance for business and home-throughout the United States and in all important foreign countries.

When the Agricultural was founded there were 65 New York stock companies and 63 Mutuals reporting to the State Department. Now all but 18 of the former are gone—only 2 of the latter remain!

Yet through these past 78 years the Agricultural has gone ahead. It has developed new policies to meet new needs. It has widened its breadth of service and added to the number of representatives who offer you its policies. All with the result that its present financial strength is unquestioned. And that is essential today!

Let us send you a financial statement. We shall be glad to have you make your own comparisons.



Assets, \$15,494,368.75 Capital, \$3,000,000.00 Surplus, \$4,788,385.09

THESE AGRICULTURAL POLICIES ARE AVAILABLE TO ALL PURCHASERS

+ Parcel Post Aircraft Damage

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· Use and Occupancy · Rent and Leasehold · Windstorm · Floater and other property coverages

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& Bascom Aeri-

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may find exact-

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hoping for. In-

vestigate!

Keeping Pace With Industry

Industrial methods have progressed at an amazingly fast pace during the half century that the Broderick & Bascom Rope Co. has been making wire rope.

To keep pace with the ever increasing demands made upon wire rope by more powerful machines, this company has devoted all its energy and accumulated knowledge.

It was not enough to make stronger ropes; but ropes in which flexibility and elasticity were so nicely combined with greater strength, that long life and economy were assured.

The designing of such ropes and the designing and building of machines to make them—even the erection of new factories to house these machines—are accomplishments of which this company is justly proud.

The most famous of these ultra modern wire ropes is Yellow Strand, distinguished from all other ropes by having one yellow strand. Its wire is drawn to our special specifications from steel of Swedish origin.

Yellow Strand is a heavy duty rope that finds best opportunity to show its mettle under severest operating conditions.

Broderick & Bascom Rope Co.

St. Louis, Mo.

K Seattle Portland Houston
Factories: St. Louis and Seattle

Manufacturers of nothing but wire rope for \$5 years

Yellow Strand WIRE ROPE



chants allowed their stores to get so cluttered up and dirty that the merchants hardly knew themselves what they had on hand. All this may have been very well in the days of our fathers, but not now.

Another powerful factor is the personality of the operator. I have known both chains and independents to fail under one manager and succeed under another, solely because the successful manager was more courteous and considerate. Here, I believe, the chains rate higher than the independents. Many of our home merchants not so long ago made a man feel that they were doing him a favor by selling him goods. They never thought of improvements nor of better methods of presenting their goods. Now they are paying the penalty.

May act as boomerang

ONE of the weapons extensively employed by the independents is the radio. In this section it has been, according to my observation, somewhat effective, but not so effective as some of its friends believe. Some of the attacks are bitter, and I question whether these may not in the end recoil upon the interests delivering them.

The independent of course, has the advantage over the chain store in a number of ways. The up-to-date local merchant who has long been a fixture in the community certainly has the inside track on the transient chain-store manager. Nor does this type of independent merchant have to equal prices to hold his customers, even those of slender income. But merchants of this type, possessing the personality, diplomacy, and business judgment required to maintain their stores as efficiently as the chain-store operator does his, are rare in my community. What few there are seem to have increased their trade in the face of severe competition, while many of their less efficient brothers have gone the way of the old-time miller.

The reader may have perceived from this that I do not quite know where I will ultimately deal. He is right; I do not know, nor do most of my neighbors with whom I have discussed this question. All told, I would rather deal with a progressive home merchant, even if he can't quite meet the chains' prices, and I believe that this type of merchant would obtain the bulk of the trade in this community. But, as I have said this type of man is rare, and for many of our merchants I can see no other fate than failure, a fate that they would have experienced even had the chains not come into being.

When writing to Broderick & Bascon Rope Company please mention Nation's Business



The Packers Know a Good Investment

Wilson & Co., famous packers, use International Trucks. They bought their first Internationals five years ago. Since that time they have repeated to the extent of 140 trucks... and 138 of these are still in active service today.

Wilson & Co. send these trucks to their many branches throughout the country. "Once an International has been put in service by a branch," the home office tells us, "that's the last we seem to hear of it, and no news in this case is the best kind of news." A detailed daily cost-and-upkeep record on every truck testifies to the soundness of the International investment... and to remarkably low operating costs and upkeep. Some of these trucks run 200 miles or more per

day ... well over 60,000 miles a year.

International Trucks are highly favored in the packing industry. Swift, Armour and Cudahy use them and so do other packers the country over. There is only one answer . . . Internationals give, unfailingly, the fast, reliable transportation upon which the success of the packing industry largely depends . . . and give it economically!

That is one industry. International Trucks meet the transportation needs of every industry. Your trucking needs may be different... but they are no exception to this rule! Every International meets the constant common demand for sound economy and solid dependability... by the mile and by the ton.

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in the United States
and Canada

render exceptional service for widespread organizations or for single unit users.

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INTERNATIONAL HARVESTER COMPANY
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INTERNATIONAL TRUCKS



Our Never Ending War on Friction

By GERALD WENDT

Author of "Matter and Energy"

UST a quart of oil for 20 gallons of gasoline, or perhaps for 50. But it's essential. The car would run on alcohol or on liquefied coal, made by the new German process, or on benzene, but it won't run without petroleum lubricants. What's more, lack of lubricants would stop not only the automobiles but also all steam engines, locomotives, turbines, dynamos and motors. Without them there would be no

railroads or steamships, no electric lights or telephones, no mills or factories, no trolleys or hard roads—and no cities.

The machineless age, dream of tired esthetes, without mass production, transportation or distribution, would be upon us, a primitive life of hard labor on the farm for those few who managed to survive, a constant struggle with nature for food and shelter. Without lubrication not a wheel would turn. Civilization would be at an end.

Is there any danger? Not for this year or next, surely. Yet our world hangs by this single thread, and that's precarious.

A billion and a half barrels of petroleum were produced last year. About 50 per cent was burned as fuel and half of the remainder was used for lubrication, some 400 million barrels. There is no shortage and the supply of petroleum seems ample. The demand just now is

● IF ALL the factories in the world were forced to shut down tomorrow, civilization would be at an end. And these plants would have to close if there were no lubricating oil. Petroleum is the only known source that will supply the needed oil and that supply is limited. What will happen when that supply is gone? Science doesn't know—yet

> for gasoline. Many millions of barrels of good lubricants are converted to fuel every year by "cracking." The new hydrogenation process is reported to produce more than a barrel of gasoline from every barrel of crude oil, with no concern for lubricants. They are plentiful enough to be taken for granted.

This cracking process reversed

YET the petroleum industry has once before changed its objective. Time was when gasoline was just a plain nuisance and all the value was in kerosene. The next great change will occur as soon as petroleum becomes scarce. Science is ready for it, thanks to the far-sighted researches of Friedrich Bergius and of Franz Fischer, for coal can now be economically converted into motor fuel, and our coal deposits will last for centuries. The oil refineries will then reverse their chemistry and will make lubricants from gasoline.

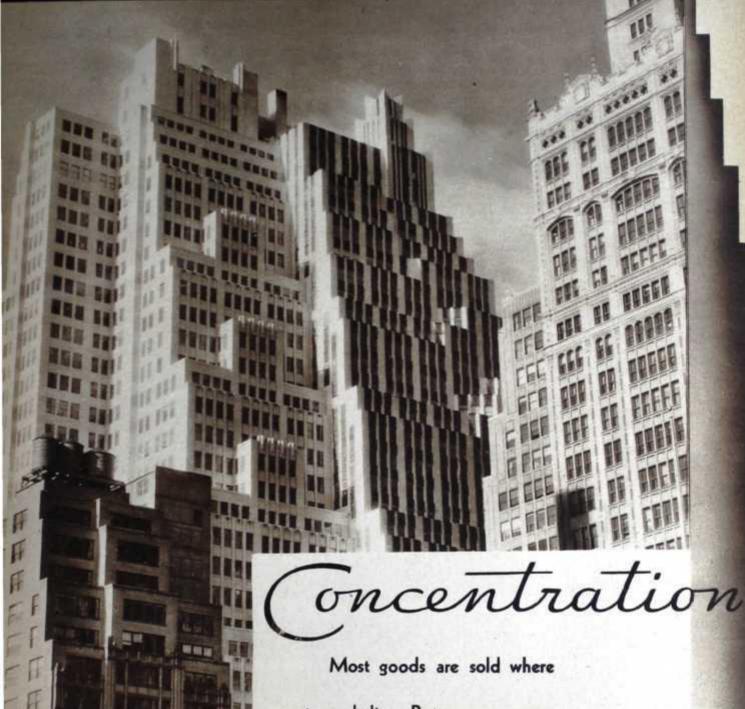
It hasn't been done and isn't easy. The breaking down of heavy oils into light ones by heat and pressure is aptly called "cracking." But the reverse process is likely to require all the oil kings' horses and men—and dollars. It's the old problem of unscrambling eggs.

Nevertheless this is the most probable answer to the demand

for lubricants. Other oils, fats and soaps would do; in fact, some of them are better than any mineral oil. But the supply of animal and vegetable fats will always be microscopic compared to the needs of a mechanized world. There is also the possibility that mineral solutions, such as some silicates or phosphates, can be developed to give the required viscosity without corrosive action on metals, but this is unknown ground. There is nothing on the horizon that could replace petroleum.

Unless, perchance, our ideas are changed by finding out precisely what lubrication involves. No one knows exactly. Two things, at least, every lubricant must do—prevent corrosion of the bearing surfaces, and reduce friction. This latter it does by preventing contact of metal with metal. Its chemical nature must include a strong attraction for the

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For years the paper setting the standard for every type of rotogravure reproduction, yet proving equally well suited to fine color or to black and white printing, has been a Kimberly-Clark product. metal surface so that no pressure or speed can squeeze out that protective

Lubricating engineers speak of two types of lubrication. In the case of heavy, slow-moving machinery the high pressure tends to squeeze the lubricant out and to dry the bearing. The affinity of the grease for the metal must be strong enough to resist this pressure and keep the metal covered. Such lubricants contain fats or soaps. Mineral oil itself wouldn't hold. But with light, highspeed machines this is not a factor; the bearing is loose to leave room for a cushion of liquid oil which is maintained by a constant stream from a pump. In both cases the actual friction is between oil and oil.

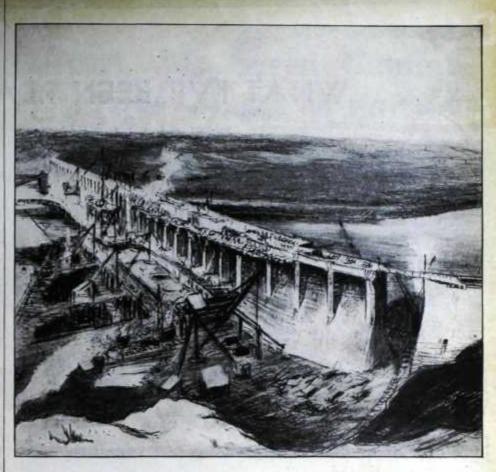
Friction and viscosity

IT IS here that we meet ignorance and the need of research. What causes the friction of oil on oil? Viscosity is supposed to measure it, but it serves opposing needs. The "heavier" the oil, hence the more viscous, the better it holds its place in the bearing; but for the same reason it also resists motion more, which is friction. Hence we use in each case the lightest oil that will stay put. Perhaps a lubricant can be found with a lower viscosity which will nevertheless not escape.

The situation under high pressure is similar. The lubricant is now chosen for its power to hold to the metal. This probably has nothing to do with the friction of the grease layer against the opposite layer of the same grease. Since most of our vast industrial power is used up in just this friction it is worth having the exact answer.

Present lubricants do cover the metal. They reduce friction by preventing metal-to-metal contact. They eliminate corrosion by preventing metal-to-air contact. But probably they are far from the final answer to the problem of eliminating friction, that insatiable giant who takes heavy tribute of our supply of energy at every transfer point.

Perhaps the answer lies in the further development of the ball-bearing or roller-bearing principle. It may be found in the "frictionless" metals, which wear quite smooth and so slide easily. But certainly our knowledge of lubrication is still crude and superficial, and later generations will think of present practices as we think of the days of candles and oil lamps. In the years before petroleum becomes rare and costly this problem must be solved. Not only individually but nationally we must ultimately "check the oil."



KEOKUK BAKER RIVER BIG CREEK CONOWINGO

and now

OSAGE The Union Electric Light and Power

Company of St. Louis now has under

construction the great Osage hydro-electric development on the Osage River, Missouri. This station, which will have an ultimate capacity of 268,000 horsepower, is being designed and constructed by Stone & Webster Engineering Corporation. The project will create the "Lake of the Ozarks," 129 miles long, with a shore line of 1300 miles.

STONE & WEBSTER ENGINEERING CORPORATION

A Subsidiary of Stone & Webster, Incorporated

Associated in Canada with WILLIAM McCLELLAN and COMPANY, Limited Montreal

WHAT I'VE BEEN READING

By WILLIAM FEATHER

President, the William Feather Company, Cleveland, Printers and Publishers



William Feather tells

how he selects his reading and gets it done

★ WHEN I began this work the Editor said that he wanted me to write about books which a business man read and not about books a business man ought to read. The assignment has caused no change in my reading habits. I read and hear of new titles. Friends recommend books. About once a week I visit a bookshop. A century-old classic may whet my appetite. I am privileged to buy and read and tell about it here.

My reading is done at home in the midst of a family that makes no concessions to temperament. Nobody apologizes for interrupting. If the dogs want attention, they demand it. I do my reading in our most comfortable chair, placed in our pleasantest room. Others of the family prefer this room, too, so we fight it out, and thereby teach each other concentration. Spending three or four nights a week in this environment, I get as much reading done as I care for.

I read as much as I do because no better alternative presents itself. Cards bore me, and so far I have resisted the temptation to try golf. I have never worn glasses and don't know how a headache feels. If my eyes hold out, I shall read as long as I can hold a book in my hands. It is an escape I cherish from a sometimes sorry world.

O JOLT employers who are indifferent to accident prevention because their insurance premium is not excessive, H. W. Heinrich devotes the first chapters of "Industrial Accident Prevention" to a demonstration that the "incidental" cost of accidents is four times as great as compensation and medical payments.

Heinrich is assistant superintendent of the engineering and inspection divithroughout industry. Executives who are seeking to stop leaks in the profits can turn their attention to safety work with assurance that their time will be profitably used. Accident prevention, in

sion of the Travelers Insurance Com-

tends that the four-to-one rule holds

Conceding exceptions, Heinrich con-

fact, can be thoroughly effective only when it is given serious executive attention.

This book is a splendid text for the higher-ups in safety work. The first five chapters are worth the time of the Big Boss. They speak his language.

SINCE I began to write about books, I am surprised how often my interest has been attracted to diaries and journals. Off-hand I recall that in these pages I have mentioned Samuel Butler's "Note Book," Amiel's "Journal," and the journals of Emerson, Thoreau, Burroughs and Hawthorne.

Last month I read another book of this type called "The Fountain of Life" by Havelock Ellis. It is a collection of random notes, written at leisure during a period of many years. In this writing the reader gets, in a few words, the best of the author's thoughts and impressions. Ellis is one of the great men of our times. In this volume, we have a fine mind, diverted by a thousand different fancies, expressing itself as freely and as entertainingly as in an intimate conversation.

In one paragraph, Ellis pays tribute to the journal of Goncourt in words that might apply equally to his own writing.

"The literature most adequate to the needs of life," he says, "is that most capable of transforming the facts of life into expressive and beautiful words."

Goncourt, he continues, is always able to say what there is to say, simply and vividly; whatever aspect of life presents itself, of that he is able to speak. Goncourt held that whatever is deeply thought is well written, an observation to which Ellis gives his approval.

The paragraphs in "The Fountain of Life" range over the whole gamut of life. Music, art, sex, flowers, weather, and architecture are a few of the subjects that interest Ellis. Tolerance is the foremost characteristic of Ellis. I didn't find an abusive line in the whole book.

DR. RICHARD T. ELY, director of research of the Institute for Economic

Fountain of Life, by Havelock Ellis. Houghton Mifflin Co., Cambridge, Mass., \$4.

¹Industrial Accident Prevention, by H. W. Heinrich. McGraw-Hill Book Company, Inc., New York, \$4.

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Toush and KARDEX Short-cuts the Route to Profits ...

The plane gains altitude. Snap . . . snap . . . snap. In a few minutes its eagle-eye has seen more than ground surveyors could see in months.

Kardex performs the same service for business. Gives at a glance what used to take months of costly analysis.

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The vital questions of STOCK Control are discussed in Kardex books: "Let's Take Stock"—for manufacturers and "Straight to the Heart of Stock Control"—for wholesalers.

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Please send me the following books:—

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"'Straight to the Heart of Stock Control,"
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A large eastern manufacturer of hardware specialties was planning a new building to warehouse an 8,000-item stock, ranging from small bolts to giant anchor rods. Following a common practice, the bulkier stock was to be piled loosely on the floor and the smaller items stacked in kegs and boxes—until The Lyon Man was consulted!

After a thorough analysis, The Lyon Man submitted a detailed storage plan which utilized the "air rights" of every foot of floor space. Extrasturdy Lyon Steel Shelving was specified for storing heavy stock ceiling-high; deep Lyon Steel Bins for small items. The Lyon plan was adopted—and the manufacturer cut his warehouse overhead 50%, both literally and figuratively.

In 95 concerns out of 100—yours, perhaps, similarly impressive economies could be effected through this specialized service which only The Lyon Man offers—the intelligently planned application of steel equipment to any storage problem, whether it be in factory or office; club, school or hotel; warehouse or retail store.

Whether you manufacture locomotives or kitchen ware, whether you sell motor trucks or haberdashery, The Lyon Man can show you how to save more with Lyon Steel Equipment—lockers, shelving, cabinets, store fixtures, display cases
—designed and installed to fit your special need.
Savings in space, in labor, in time, in depreciation
—gratifying economies that will contribute daily
to lower overhead.

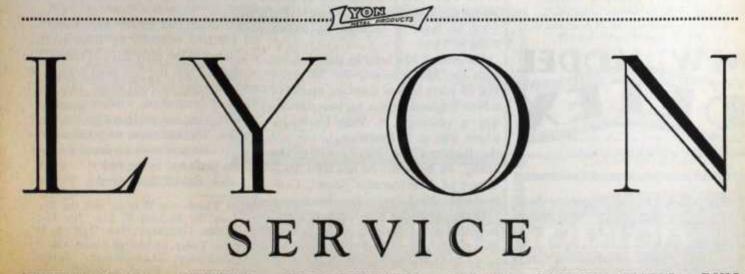
He will show you, too, many advantages in Lyon Steel Products—sounder engineering, sturdier construction, greater strength, superior design, wider adaptability, longer life, more durable finishes. Advantages that, plus Lyon Service, are the reason why, against the sharpest competition, Lyon is awarded the majority of jobs.

Without obligation, The Lyon Man will gladly analyze your particular problem and submit detailed plans showing exactly how your business can profit by the use of Lyon Steel Products. To take advantage of this Lyon service, address: Lyon Metal Products, Incorporated, Aurora, Illinois. Branches, Jobbers and Dealers in All Principal Cities.

WHEN The Lyon Man calls he speaks with authority, not about your business, but his own—systemization in steel. He speaks from 30 years' experience in eliminating overhead from the nation's business, from a knowledge gained in helping many industries run more smoothly. What he says Lyon service will accomplish for you, that it will do—as America's greatest institutions will gladly testify.

A Few Representative Users of Lyon Equipment

Cadillac Motor Car Company Chicago Daily Tribune Chicago and North Western Railway Crane Company Goodell-Pratt Company Goodyear Tire & Rubber Co. Hurley Machine Company John Wanamaker Otia Elevator Company Owens-Illinoia Glass Company Real Silk Hosiery Mills, Inc. The White Motor Company



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All the value of a business, much of its value as a going concern, depends for the certainty of its safeguard upon the Watchman's System. It, alone, tells that the watchman was on the job, watching the plant.

Detex Watchman's Systems now offer new values in durability, adaptability, continuity of service, and freedom from repair, built into the Detex New Model Watchman's Clocks. Long the leaders—80,000 now in use—these models have been improved and strengthened to make them even more serviceable to industry, to assure to even greater extent that their records will be unalterable and indisputable evidence of the guarding of the plant.

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Research, has chosen a good title for his latest book, but the book itself is very repetitive because of slovenly editing. It struck me that the chapters were hurriedly slapped together to insure publication before hard times ceased to exist.

Dr. Ely is insistent that research must precede comprehension of the cause of hard times. One cause to which too little attention has been given is speculation in land values and improper use of land. Land that should be reserved for forests is tilled, and land that should be tilled is subdivided for urban dwellings. Farms are of the wrong size for economical production, and subdividers have anticipated growth of population by a whole century. The waste is terrific.

A suggestion for a peace-time army is made, the members of which would be the temporarily unemployed. The plan is so vague in the mind of its author that it is not worth discussing. The chapter abounds with such sentences as "It would be foolish in a paper like this to work out the details" and "All that is attempted in this chapter is to give the general idea."

If those who protest against unemployment insurance do not propose a concrete, workable substitute, with details properly developed, they will have to accept out-of-work benefits as part of our economic system. Millions today are shamed by the spectacle of honest men, eager to work yet unable to find a job on any terms. They are ready to try any way out that appeals to their practical sense. At this time, to postpone action while we indulge in "research" is annoying.

MATHER ALMON ABBOTT, author of "The Boy Today," is so outspoken in his book that it seems well to state his qualifications to speak before telling what he says, or commenting on his point of view.

Dr. Abbott has been in close contact with the American boy for 34 years. For 19 years he was assistant master of a New England school, for five years he was a professor at Yale University where, also, as an avocation, he coached the freshman and varsity crews, and finally, for ten years he has been headmaster of Lawrenceville School, Lawrenceville, N. J.

If the American boy has faults, and Dr. Abbott acknowledges that he has, they are the reflection of the era in which he lives. The boy is as idealistic as he ever was, but he is living in a hard-boiled world, and when he enters this world he adjusts himself to it by be-

coming hard-boiled himself. He does as his father and mother do, not as they say he should do. His mother and father can't fool him. He knows them for what they are, and not for what they try to make him think they are.

If the younger generation is to be properly guided, Head Master Abbott believes that parents must awake to their responsibility. They must take a hand in the job. They must give up some of their social activities and maybe some of their cocktail parties.

"I honestly believe that most parents really desire to do what is best for their offspring," says Dr. Abbott, "but, in this complexity of modern life and new conflicting ideas, they do not know what is best for their young; moreover, so busy are they with other duties that they have not the time to bring up their children properly."

It is certain that the almost universal plan of passing the burden of discipline to other parents will not work. Too many parents are letting their children go bad because other parents let their children go bad. Such is the excuse parents give to Head Master Abbott.

This is a timely book, worth reading.

THE subtitle of "Dynamite" by Louis Adamic is "The story of class violence in America."

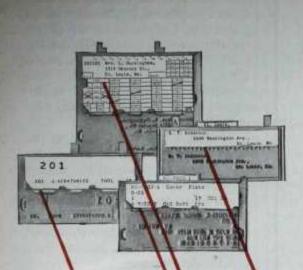
This is a remarkable book. It tells us that dynamite and bullets are one form in which Americanism expresses itself. In most other parts of the world, the poor are taught to take their poverty philosophically. The American is taught that he is just as good as any other man, if not a little better. He measures his poverty not by lack of food and shelter, but by the number of his unsatisfied desires. He is far more likely to steal an automobile than a crust of bread.

Terrorism and gunfire were found to be effective weapons by both capital and labor in the early days of industrial struggle. Their use has been continued and extended by both sides. The technique of dynamiting, window smashing, and slugging was perfected by the labor unions. The technique of criminal terrorism—the use of professional gunmen—was perfected by capital.

Labor unions now employ gunmen

*Hard Times—the Way in and the Way out, by Richard T. Ely. The Macmillan Company, New York, \$1.75.
*The Boy Today, by Mather Almon Abbott, headmaster, Lawrenceville School. Fleming H. Revell Company, New York, \$2.

Dynamite, by Louis Adamic. The Viking Press, New York, \$3.





DIRECT From Records to Forms

The ordinary business record serves merely for reference... nothing more. Names and data must be copied from them by hand. Hand copying costs money. Simply to head a statement rom a ledger page, for instance, requires 50 or more separate motions.

Addressograph self-writing records remove the expense of ordinary records. Whether it be a name and address of a customer or prospect—a description or specification—an employee's name—any data on an Addressograph record writes itself mechanically on any form in ONE motion.

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...or copy names and information from these records frequently or infrequently on statements, bills, sales literature, cards, orders, checks, payroll forms, and other business forms... Addressograph can save money for you.

In the handling of direct mail and sales promotional literature...in addition to the numerous record keeping and writing jobs it performs... the Addressograph has been for years standard equipment.

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The Addressograph self-writing records shown are a few from over 35 different styles provided for the permanent recording of an exceedingly wide range of record data.

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They can be indexed, cross-indexed, and fitted with classification tabs, making them readily usable for reference, for automatic selection, and for automatic selfwriting purposes.

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We keep your Home Fires Burning

DESPITE the world-wide fame of R & M Fans for breeziness, we probably devote as much ingenuity to warming folks up as we do to cooling them off. It is a quiet, trouble-proof R & M motored fan that makes your oilburner "work" by vaporizing the heavy crude fuel. It is an R & M Fan that spins silently behind the heating element in many an electric heater, propelling balmy air into chill corners. Sturdy R & M motors make automatic stokers stoke-some of them giants feeding tons of coal daily. And in the boiler-room of homes as well as in great hotels and factories there are midget R & M motors of 1-50 H.P. controlling the dampers, regulating temperature and conserving fuel. Neither heat, nor soot, nor inattention stops these job-fitted fans and motors. Unseen, unheard and unbeknown, they run for years on an occasional drop of oilsplendid examples of what we mean by Robbins & Myers precision manufacture.

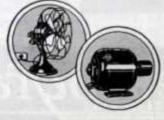
> If you have a problem in electrical-motored machinery, come to Robbins & Myers. We offer you the facilities of a completely modern plant and the experience of 33 years' precision manufacture in designing, building and applying electric motors, generators, fans and electrical appliances.

Robbins & Myers. Inc.

Springfield, Ohio

Brantford, Ontario

1878



1931

FANS, MOTORS, HAND AND ELECTRIC HOISTS AND CRANES

for their dirty work, Adamic says. It is a safer procedure. The results are adequate and the good name of the union is partly protected in the event of apprehension. Unfortunately, the professional racketeers like steady employment. They refuse to be dismissed at the whim of the labor leader. Consequently they now seem to be a permanent overhead burden in many labor unions.

"Dynamite" tells the story of the Molly Maguires, the Haymarket tragedy, the Homestead strike, Coxey's army, the trial of Bill Haywood and others in Idaho, the McNamaras and the Los Angeles *Times*, the Mooney-Billings conviction, the great steel strike, the Centralia shooting, and the Sacco and Vanzetti turmoil.

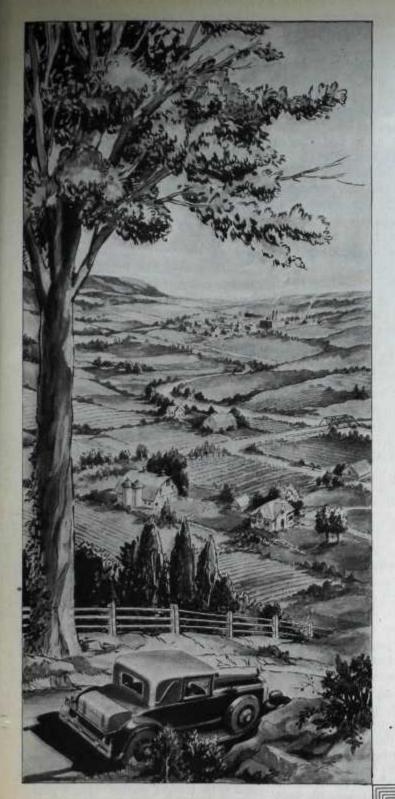
It is an ugly, terrifying recital. The author is a young man who began his career in this country as a laborer. He worked on land and sea. He is not an intellectual who became a wobbly, but a wobbly who became an intellectual. He is frankly a labor sympathizer, but less bitter toward capital than one might expect.

ANYONE who is willing to hear labor's side of this century-old struggle will find the book highly informative, and it occurs to me that the employer who reads the book may be stimulated to devote earnest effort to the stabilization of employment and the improvement of working conditions. His motive may be either humanitarianism or good sense. The author's specific examples of quiet sabotage and "soldiering" are alarming, indicating that dissatisfied workers can be expensive, even with low wages.

Adamic writes flatteringly of the corporations that have experimented successfully with stabilized production and employment, mentioning Procter & Gamble, Dennison Manufacturing Company, S. C. Johnson & Sons, Packard Motor Company, Hills Brothers Company, International Harvester Company, Tennessee Copper and Chemical Company, and Knox Hat Company. Among individuals he commends Owen D. Young of General Electric, Daniel Willard of Baltimore & Ohio, and Senator James Couzens.

His contempt for the American Federation of Labor which, he says, boasts that it is the "Aristocracy of Labor," is expressed in these words:

"Today the A. F. of L. is utterly spiritless. Its leaders are pompous, hightoned Babbits, some of them with stock-exchange tickers in their offices. Its conventions compare with those of



The FIELDS ARE GREEN AGAIN

SPRING again has come to the Missouri Valley, unmindful of the echoes of depressions, untroubled by worry, undisturbed by human uncertainties.

Spring brings growing things to the Valley every twelve months—new growth and new wealth, a fresh start for crops and men and hopes.

For hundreds of miles in every direction from Kansas City the fertile soil again is creating and producing as if nothing else mattered—a contagious spirit that is good for the 21 millions of us who live within a stone's throw of orchards and grain fields and pastures.

It is the annual start toward another 3-billion-dollar harvest.

Kansas City offers many advantages to the manufacturer, not the least of which is close, wholesome contact with this vast producing and consuming market.

INDUSTRIAL COMMITTEE OF

KANSAS CITY'MO

THE CHAMBER OF COMMERCE OF

Industrial Committee, Chamber of Commerce, Kansas City, Mo.: Please send me the Book of Kansas City

Please send me the Book of Kansas City Facts. I am interested in the

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Name_____

Address ____

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Edison's New Dictating Machine

EDISON pioneered in office

organization

The Ediphone quickly brought order out of the confusion of notebook routine, avoiding office travel, waiting, and the matching of two persons' time. When you provide Ediphones for your dictators, you take the most important step toward better office organization.

Centralization of transcribing was made practical, enabling employees to operate under supervision for "better letters" while saving the time and annoyance to dictators of training new assistants.

The reward for this enterprise is better and more permanent organization which is highly profitable both to the firm and employees.

Our National Service will prove this at your desk and guarantee the continued satisfaction of your entire office. Hundreds of our old customers, nearby, will tell you so. Telephone "The Ediphone," your City, or write for our new book, "Now—How About My Business?"

THOMAS A. EDISON, INC.

ORANGE, NEW JERSEY

World Wide Service in all Principal Cities

the Elks, the Rotarians, and the National Association of Soap Manufacturers. They invite army generals to address them. William Green, Gompers' worthy successor, goes to West Point to review the cadet corps and receive honors such as are ordinarily rendered only to visiting royalty, while in Massachusetts they let Sacco and Vanzetti go to the chair and, in California, Tom Mooney, a trade unionist, stays in prison for 14 years although innocent of the crime for which he was convicted."

That, of course, is a piece of juvenile nonsense. It is true that the Federation's membership is only 2,000,000, but this intelligent group by wise leadership is gradually improving conditions for all workers. But, like all hysterical radicals, Adamic hates the conservative wing of his own group more than he hates the enemy.

An example of his stupidity in practical affairs is his assertion that the five-hour, five-day week at the same or higher wages than are now paid for a longer day is "unquestionably feasible." He assumes that all of the increase in the productivity of labor during the last decades has gone into the pockets of capitalists. He blinks at the fact that prices have gone down and real wages have gone up.

He mentions a \$100,000 débutante ball and insinuates that the elimination of such needless waste would be sufficient to give every worker a home in the country and a Ford car.

The trouble with Adamic is that he mistakes the noisy demonstrations of Communists for progress. He is still young. When he has served the labor cause as long as some of the veterans in the American Federation of Labor he will realize that there is no progress in One Big Strike or, in Red tactics. The Tom Mooneys, Sacco-Vanzettis, and McNamaras retarded labor's advance.

PAUL HOSMER dedicates his book, "Now We're Loggin'," "To my wife, who has helped me wonderfully in the preparation of these articles by remaining perfectly quiet and indifferent while the operation was going on."

When I encountered that, I was confident I would be using my time to advantage if I read what followed. I was not disappointed. Hosmer has written sketches about the major and petty officials of a modern lumber company. He has a lot of fun with the objects of his kidding, none of which is lost for the reader even though he, like myself, has never been within 500 miles of a big logging camp. Hosmer's writing is bold

and racy. It is alive with salty expressions. Not for months have I read anything so well done and well-flavored as the sketch about "The Swede Lumber Worker."

Other characters who are publicly fried are the General Manager, the Sales Manager, the Logging Superintendent, the Purchasing Agent, the Yard Foreman. There is a total of 14.

Hosmer, a former newspaperman, now editor of a lumber company's house organ, is everlastingly puzzled by the persistent claim that no lumber company makes any money. The proprietors own vast estates and occasionally are driven to the camps in sixteen-cylinder cars. They operate hotels, railroads, steamship lines, and hosts of other enterprises. Ruin, however, is just around the corner.

This observation struck me as one of the best bits in the book. It gives the philosophy and outlook of the lumber industry a universality that identifies it and its members with every other human activity.

I GALLOPED hurriedly through a book called "Tape Reading and Market Tactics." It is for the man who bobs in and out of stocks. The lessons in the technique of trading appealed to me as a ghastly warning of the futility of trying to make money from short-term movements. The operations are so complicated, and the professionals whom the trader must combat are so uncannily shrewd, skillful, and ruthless that only a fool would test himself against them.

One bit of advice appealed to me. The author twice quotes Sir Francis Bacon who wrote nearly 300 years ago:

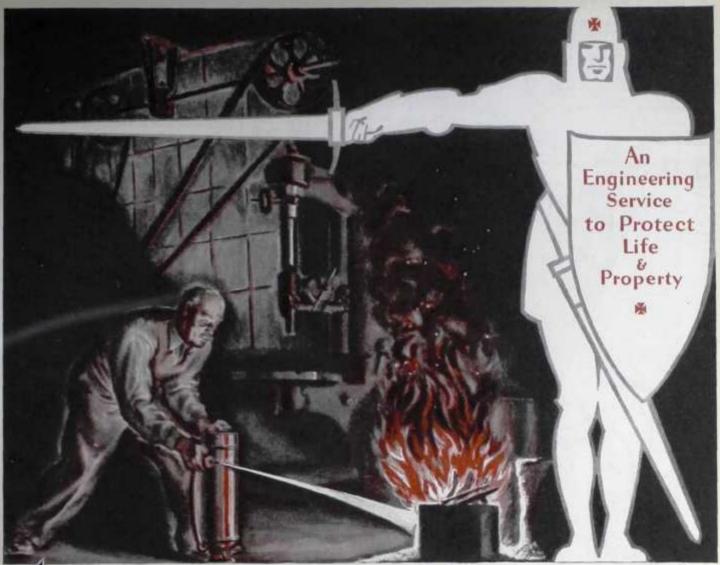
"Doubt all before you believe anything!"

Deep cynicism appears to be the one indispensable quality necessary for success in the traders' market. That is probably why few business men can be successful traders. Success in business demands optimism and mutual confidence.

When he goes into the market, however, he must change from a Dr. Jekyll to a Mr. Hyde. He must be all that he is not in his workaday life. He must be hard, suspicious, merciless, unbelieving. This book seems to tell the truth about the traders' market.

"Now We're Loggin', by Paul Hosmer. Metropolitan Press, Portland, Oregon, \$2.

Tape Reading and Market Tactics, by Humphrey B. Neill. B. C. Forbes Publishing Co., New York, \$3.



A lick of flame - a building menaced a business threatened

Three! Over and over through the watchman makes his rounds, search-fire? ing for the unexpected-the threatening. Suddenly there's a lick of flame-tiny in size, gigantic in possibilities! A moments work with an extinguisher . . . and what might have been a disaster becomes an incident that passes in the night!

A story that might have been taken from experience in thousands of industrial plants. A story that may be

Eleven o'clock! Twelve! One! Two! duplicated in your plant tonight! to be sure the equipment is always Are you sure your plant is properly lengthening hours of the night, the and adequately protected against

> American-LaFrance and Foamite offers you a service represented by the Crusader, a service based on four things: A complete study of the type of equipment your property calls for; the installation of proper and adequate safeguards; instruction of your employees as to the proper use of this equipment; and, if you like, regular check-up by our engineers

Why not have one of our fire protection engineers call. You will find him unprejudiced because his company makes every recognized type of fire-fighting equipment. Write for an appointment. . . . American-LaFrance and Foamite Corporation, Engineers and Manufacturers, Dept. D77, Elmira, New York.

Fire" is a booklet describing our service and products. A request brings it to you.

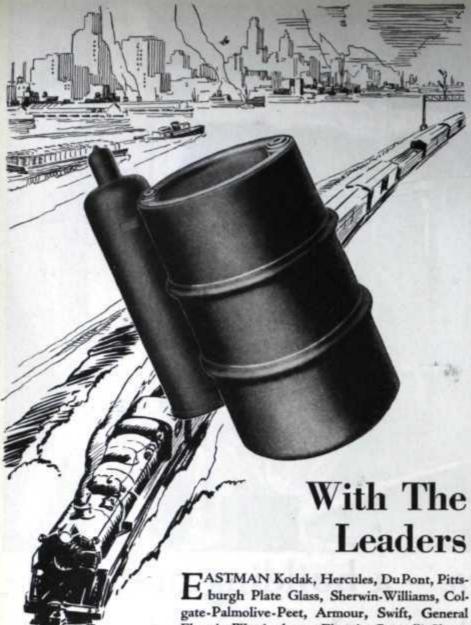
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The Hackney Line

Hackney builds a complete line of — Seamless steel barrels with full removable heads or patented raised openings — Steel drums with full removable heads or patented raised openings — Two piece barrels and drums — "Light Shippers" — Seamless Steel Cylinders — Special shapes. burgh Plate Glass, Sherwin-Williams, Colgate-Palmolive-Peet, Armour, Swift, General Electric, Westinghouse Electric, Grasselli Chemical, Johns-Manville, Penich & Ford, Tanglefoot, National Carbide, Allis-Chalmers, Ingersoll-Rand, Fairbanks-Morse, The Milwaukee Road. These are a few of the many princes of indus-

These are a few of the many princes of industry, who are using Hackney permanent steel containers:

Shipping and storing—as the widely separated industries represented suggest—all kinds of bulk materials, liquid and dry—such as paints, oils, food-stuffs, pastes, chemicals and gases.

Such an outstanding group of users speaks for the satisfaction and service which Hackneys must give. Write for the catalog and complete details on the advantages of using Hackney permanent steel containers.

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1355 Vanderbilt Concourse Bldg., N. Y. City 487 Roosevelt Bldg., Los Angeles, Calif.

Hackney

Who Needs Traffic Management?

(Continued from page 52) and service information to be used in price lists and advertising matter.

"It can help the sales department by promoting good relations between the firm and its customers."

"All right," said Mr. Jones. "But what will it cost?"

"It is practically impossible to answer that question," said Mr. Smith, "because every enterprise has individual conditions and problems. Few firms overdo their traffic expenditure. The majority appear to spend too little.

Wide differences in costs

"IN A general way the total expenditures for transportation reported by firms replying to the Department of Commerce ranged from \$5,064 to \$9,959,000. A retail department-store manager said that his transportation expenses equalled two per cent of his total operating expenses while a whole-sale dealer in fruits and vegetables reported that his transportation expenses were 92 per cent of his total operating expenses.

"The percentages reported by other firms ranged between these two.

"The difference between these figures is due partly to different needs and conditions and partly to different classifications of traffic and transportation functions. Some include all the items that may properly be listed under this head, and others distribute these items to various departments including under the head of transportation only the actual freight bills and the outlay for traffic administration.

"The sums paid for transportation alone by any business—large or small may be grouped under five heads:

"Payments to carriers for hauling freight, express or parcel post and for related special services such as refrigeration and lighterage.

"Expenditures for motor trucks, industrial railroads, pipe lines and private wires.

"Expenditures for storage and warehousing.

"Expenditures for passenger transportation and travelling.

"Expenditures for communication via cable, telegraph, telephone and messenger facilities.

"These costs are, however, only a part of the total transportation expendiMan's
greatest gesture
skyward
..Empire State
Building

FRIGIDAIRE SELECTED FOR THE WORLD'S TALLEST BUILDING . .

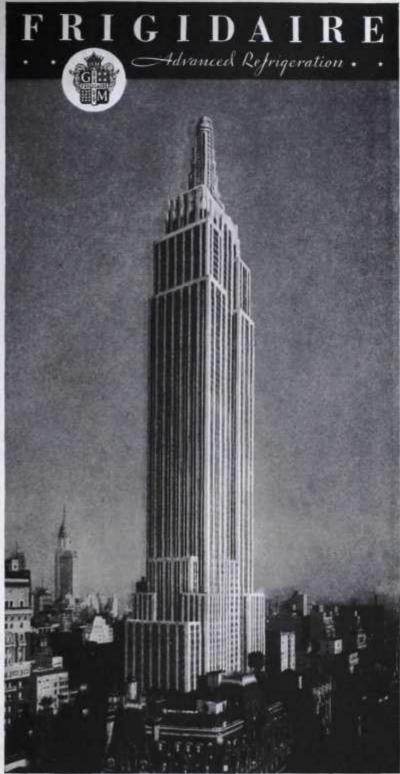
TODAY A NATION

lifts its eyes to awe-inspiring heights in tribute to the skill and genius that have given the world a towering monument to commerce and industry—the new Empire State Building.

All the manufacturers whose products have

Starrett Brothers
been singled out for use in this great building are justly
proud of the distinction — a distinction in which we are
privileged to share.

In keeping with the excellence of appointments throughout the building, the Board of Directors are installing Frigidaire Water Coolers—a choice that was made only after engineering tests had proved conclusively that Frigidaire best maintained the high standard of excellence demanded by architects,



Starrett Brothers & Eken, Inc., Builders

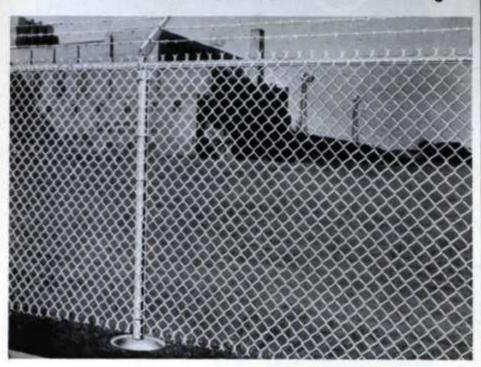
Shreve, Lamb & Harman, Architects

builders and engineers. When you consider that Frigidaire Water Coolers have been selected not only by the Empire State Building; but also by thousands of other office buildings throughout the world, where quality, quiet operation, and continued satisfaction are the sole deciding factors—for you, too, there can be but one choice—Frigidaire.

FRIGIDAIRE CORPORATION . DAYTON, OHIO SUBSIDIARY OF GENERAL MOTORS CORPORATION

FRIGIDAIRE

Not-how does it look Now?"



But-how will it look in 20 years?"

A fence around your property is, or should be a permanent investment. Like the buildings, it should resist the ravages of time and weather, withstand the hard knocks of every-day usage and give many years of satisfactory service.

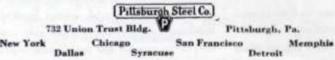
The durability of Pittsburgh Chain-Link Fence is built into it from the very first stage of its manufacture. From

the virgin ores to finished product, Pittsburgh Chain-Link Fence is made completely in the modern mills of the Pittsburgh Steel Company. Made of the finest copper-bearing basic open hearth steel, fabricated by the most modern equipment and zinc-coated after wearing with a smooth, extra-heavy and well-bonded coating of pure zinc, Pittsburgh Chain-Link Fence is designed for permanence. Securely erected on a sturdy frame of heavily hot-zinc-coated steel posts and rails and fittings of malleable-iron and pressed-steel, it is resilient in collision, non-climbable, and proof against assault . . . In designing Pittsburgh Chain-

Link Fence, "Pittsburgh" Engineers have not only improved and retained those ideas proven best by 30 years of fencemaking experience, but have developed new ideas and features of construction demanded by modern conditions.



The Pittsburgh Barbed Wire Extension Arm, an exclusive "Pittsburgh" feature, is adjustable to three positions, holding barbed wire securely in place. Deep socket fits snugly over post to exclude moisture.



Pittsburgh Fence

An experienced chain-link fence man will be glad to furnish an estimate of the cost of enclosing your property with fence. An expert erection service available everywhere. An inquiry directed to any of our branch offices will receive prompt reply and entails no obligation. tures. In 55 large concerns reporting to the Department they ranged from 18 per cent for an electrical appliance company in Massachusetts to 99 per cent for a public utility—and they averaged 74 per cent for the entire group.

"The amounts spent for traffic administration alone by firms reporting to the Department ranged from \$225 to \$1,-106,000, and averaged \$27,886 for 145 large concerns.

"In concerns spending \$5,000 to \$50,000 a year for transportation, the portion spent for traffic administration is found to be about 12 per cent while the cost of traffic administration for concerns spending more than five million dollars for transportation is about four per cent. It is likely, moreover, that the figures are more inclusive and accurate for the larger concerns."

"I can see," said Mr. Jones, "that when my company is as big as some of the concerns you are talking about, it will be necessary to have a full-fledged traffic department. But what can I do now, while my business is small?"

Saving costs by cooperation

"YOU may believe that because your business is small it does not require traffic administration; but I can assure you that you do need some one who understands traffic matters.

"For example, you might employ a part time traffic manager or assign the administration of traffic to the head of some other department who understands traffic and transportation. Or you can cooperate with four or five other concerns in employing a joint traffic manager or obtain the aid of the traffic bureau of your trade association or your local chamber of commerce. You may retain a public traffic bureau to handle your ordinary traffic activities and a commerce counsel to handle special cases before the carriers' rate committees or before the State Utilities Commission or the Interstate Commerce Commission.

"There are, indeed, many ways for you to get help from outside sources until the time when your need for a traffic department will justify the expense.

"The point I want to make is that every business, large or small, should have competent traffic management. You may say, 'I see the need for it but I cannot afford to pay what it will cost.' The answer is that you cannot afford not to pay whatever it will cost to make adequate provision for handling the traffic and transportation phases of your business."

The new CAMEL "Humidor Pack"

Again
we have helped create an
outstanding package

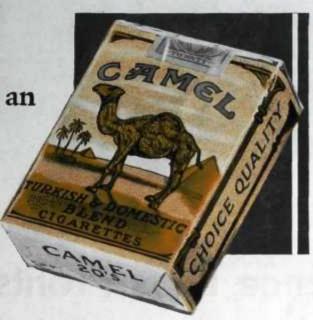
HERE is another example of how the Package Machinery Company helps a manufacturer solve packaging problems.

The new Camel "Humidor Pack" required more than the use of a moisture-proof wrapping material. There was also the problem of mechanically sealing the wrapping so perfectly that none of the inherent moisture and flavor of the cigarettes could escape through the laps or seams of the wrapper.

The Package Machinery Company met this problem by producing a special TIGHT-SEAL wrapping machine. This new TIGHT-SEAL wrapping gives greater protection against air-seepage than has ever before been possible—with Cellophane or any other wrapping material.

The machine hermetically seals the package by an entirely new method, producing an absolutely air-tight, moisture-proof seal. The result is a package which retains the natural moisture, flavor and aromatic qualities of the cigarettes for the smoker's utmost enjoyment.

You must have noticed, too, what a striking improvement this wrapper makes in the appearance of the package. Seen through



the transparent Cellophane, colors take on new life and sparkle. The end laps and seams are so smoothly sealed that they are practically invisible. So neat and attractive a package forcefully conveys an impression of quality. Men are strongly influenced by this quality appearance—and women perhaps even more so.

Camels is one of many products which have secured new sales advantages by a package improvement—merchandising victories in which our wrapping machines have played a foremost part.

Bring your wrapping problems to us solving problems built our business.

PACKAGE MACHINERY COMPANY

Springfield, Massachusetts

New York Chicago Los Angeles
London: Baker Perkins, Ltd.





A shower bath precedes each milking at the Walker-Gordon farms

Science Pays Profits on This Farm

By O. M. KILE

HERE is a story comparable to the imaginings of a Jules Verne, except that the things related are actually taking place. On this modern dairy farm efficiency and science have removed the guesswork from production, and problems of large-scale farming have been solved

STRIKING illustration of what concentrated planning and business management, backed by ample capital and a scientific staff, can do toward placing agriculture on a new and profitable basis may be seen at the Walker-Gordon farms at Plainsboro, N. J.

Most travelers on the main line of the Pennsylvania Railroad between Philadelphia and New York have noticed at a point some ten miles north of Trenton the huge 2,500 ton silos and extensive dairy barns housing 1,500 to 1,800 cows. The more observant have noted the long, low tunnel-like structure built alongside and some 200 yards distant from the railroad tracks. Green hay fed into one end of this tunnel is subjected to heat

STRIKING illustration of from a large coal furnace, and emerges what concentrated planning and business manageready to sack and store.

Scientific farm methods

THIS feed dehydrator, soon to be replaced by a recently developed type of higher efficiency, is by no means the chief feature of Walker-Gordon farms. It is not even the most spectacular feature now that the newly invented rotary grooming and milking machine which handles 50 cows every 13 minutes is in operation—but it is symbolic of the advanced and sometimes revolutionary agricultural developments taking place at Walker-Gordon farms. Furthermore, this feed dehydrator is the actual starting point for a whole chain of revolu-

tionary changes in farm management which is in reality developing what might be called a New Agriculture.

Henry W. Jeffers, president of the company and a graduate of Cornell Agricultural College, is the man who has actively pushed this line of development, but he has taken full advantage of the able advice and assistance of such men as Thomas A. Edison, Dr. Jacob G. Lipman and William Duryee, present secretary of agriculture in New Jersey. and has made liberal use of cooperation from the scientific staffs of the United States Department of Agriculture, the agricultural experiment stations of New Jersey, New York and Pennsylvania, the Rockefeller Institute, Columbia University, Princeton University, Rutgers College and the Borden Research Foundation.

Scarcely a day passes that some scientist or economist does not journey to Plainsboro to see what is being done, and nearly every week some committee or delegation arrives to study the new developments in agriculture and milk production. Mr. Jeffers numbers on his own staff experts in soil fertility, agricultural economics, nutrition, genetics,



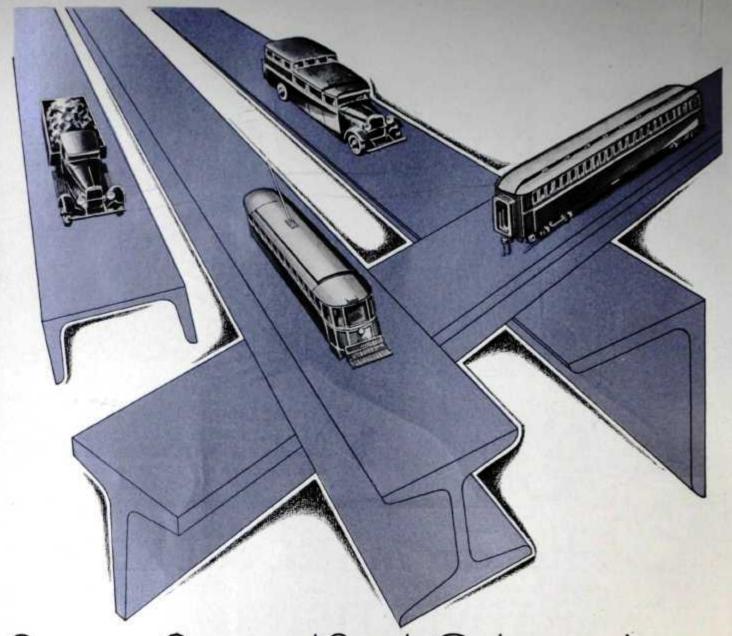
Drifles can MAKE or BREAK your ADVERTISING **

You can't afford to overlook any trifle in advertising. Expensive preparation and careful choice of media, copy, illustrations, printing plates may be largely wasted—if some final detail of reproduction fails to be effective... Printing ink, for example, costs but a small per cent of the total cost of any job—but it can make or break the profit results. The best printing craftsmanship costs but a trifle more than slap=dash work, but it contains the extra ingredient of thought, which can multiply many times the sales power of the finished job... Small things may render great service. If you want results, use thinking printers and lithographers, and let them use I. P. I. inks on your work.

ipi

75 Varick Street, New York . . . 26 Branches in principal cities

The International Printing Ink Corporation



Strong as Structural Steel-Only 1/3 as heavy These Shapes made from the strong alloys of Alcoa Aluminum

A new order of things appears. Strength is combined with light weight in structural shapes of the strong alloys of Alcoa Aluminum—up to 10 inches in depth and 90 feet in length.

Gravity loosens its grip. 2/3 of dead-weight disappears. Great girders and structural shapes assume amazing lightness. A heavy burden is lifted from transportation.

The strong alloys of Alcoa Aluminum are being used in all forms of construction, in motor cars, trucks, buses, trains, airplanes, modern buildings, and homes.

With the same power, trains and street cars attain greater speeds; schedules are faster; trucks carry more pay-load.

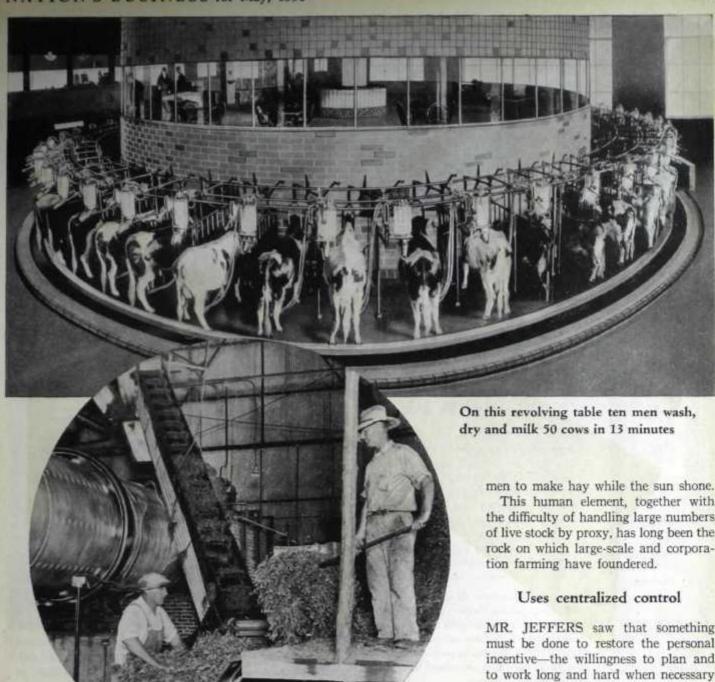
With a minimum tensile strength of 55,000 lbs. per square inch, the strong alloys of Alcoa Aluminum weigh only 1/3 as much as ordinary metals. They conduct heat many times as fast; resist corrosion.

Standard structural shapes, made from the strong alloys of Alcoa Aluminum, are carried in stock. Plates, rivets, bolts, and screws are also available.

The engineering handbook, "Structural Aluminum," is available at \$1.00 per copy. Please address your request directly to ALUMINUM COMPANY of AMERICA; 2425 Oliver Building, PITTSBURGH, PENNSYLVANIA.



ALCOA ALUMINUM



Green alfalfa, fed into this forage dehydrator, emerges as chopped dry feed ready to sack and store

bacteriology, medical control and veterinary control.

Until seven years ago Mr. Jeffers operated the 3,000 acres at the Plainsboro plant as a single farm, hiring the necessary labor, providing teams and implements and directing the various farm operations through his foremen. It was an inspiring sight to see 75 to 85 teams and drivers lined up each morning at the central barns and starting out for the fields. But it was evident that this arrangement was more inspiring than efficient.

These men, though carefully selected, were only workmen laboring by the day, week or month. They took little personal interest in results and had little incentive to more than average effort. If a man took a notion to spend most of the afternoon in the shade at the far side of the field, the foreman could not always check up on him.

The men were prompt in laying off when it rained, but could not be speeded up in fair weather. Hay making was a nightmare. Sometimes even the local jails were emptied to get the necessary

This human element, together with the difficulty of handling large numbers of live stock by proxy, has long been the rock on which large-scale and corporation farming have foundered.

Uses centralized control

MR. JEFFERS saw that something must be done to restore the personal incentive-the willingness to plan and to work long and hard when necessary -which has been the strength of the American family-farm system. Finally he worked out what he calls centralized control and decentralized operation. It is this principle applied to the handling of live stock as well as lands, that seems to point the way to successful "corporation" farming.

Men capable of farming for themselves were put in charge of sections of the Walker-Gordon lands. Areas of 125 to 175 acres were divided off, usually representing a former farmstead with necessary house and outbuildings. Each farmer contracts to pay rental figured at a fair per cent on the valuation, and to farm in accordance with general instructions from the central office. In return, Mr. Jeffers contracts to buy at stated prices all the hay and silage corn.

The farmer is assisted in financing the purchase of necessary teams and tools, all of which are bought through the central office at a considerable saving. High-



HONOLULU YOKOHAMA KOBE NAGASAKI SHANGHAI HONG KONG MANILA

ORIENT Canadian Pacific

WORLD'S GREATEST TRAVEL SYSTEM

grade tested seed corn is likewise provided at minimum cost and fertilizer is bought cooperatively at lowest prices. This arrangement enables the farmer to handle a large acreage of silage corn and alfalfa hay with only a small amount of help hired in the rush seasons. There is no rush haying season. Walker-Gordon machines cut the hay, rain or shine, and haul it to the dehydrator.

The fact that the farmers have paid off their equipment notes, bought new automobiles and household furniture and have even paid cash for land in the past few years shows that the system is a success from their standpoint. But Mr. Jeffers is pleased, too.

"Our silage corn costs only about one-half what it did under the old system. Our alfalfa hay is produced considerably cheaper than we can buy good western hay."

Plan is built on machinery

BUT, oddly enough, this system depends largely on the use of the hay dehydrator and other mechanical innovations. Without a machine to dry the hay, it would be almost impossible to cure alfalfa successfully in New Jersey and entirely impossible to get the highquality feed now obtained. Enough savings in fine leaves and enough increase in vitamin and protein content are obtained to justify the rather high prices paid farmers for the green alfalfa in the field. There is no loss of crop from rain storms; no heating in stacks or barns. The farmer has no extra having stress to interfere with full and proper cultivation of his corn. High yields of corn for ensilage are obtained and this, in turn, makes the growing of corn profitable.

Cover crops on the corn land over winter, rotating with alfalfa, and the use of commercial fertilizer when planting corn, take care of the fertility question.

"In these days manure is too valuable to use on good land," says Mr. Jeffers. "We now run it through our dehydrator and sell it for use on lawns and gardens, and buy back chemical fertilizer."

The idea of decentralized operation and centralized control is carried to its logical conclusion in handling the live stock. Only the actual milkers are kept in the barns at the Plainsboro plant. The dry cows are kept in distant pastures and just before calving are trucked to the maternity hospital at Plainsboro. The young calves are trucked to one of several distant farms, there to remain until producing age approaches.

Under a plan now being installed,



MAKER

Three directors of a large manufacturing company were in a friendly but exceedingly vigorous disagreement.

What did women consider the most important value in the article that this corporation manufactured? What characteristic of the product appealed most to women, users of the product?

One director championed the decorative value of the product. Another director defended a convenience value. The third director smilingly but aggressively backed still another convenience value.

The J. Walter Thompson Company was placed in charge of advertising for this corporation. In order to seize upon the most effective theme for an advertising campaign it was necessary to know which of the directors was right.

There was just one way to find out, of

which one knew?

course. The J. Walter Thompson Company proceeded to ask the women themselves.

A majority of the 2,000 women who were interviewed said that all of the values named by the directors were important. But even more important was one which none of the directors had named...a certain performance value.

That became the foundation of a successful advertising campaign.

In an increasing number of instances it is now possible to determine just what it is that women do think about a given product in the market. Not always what they say, but what they really think.

USER

The J. Walter Thompson Company pioneered in the effort to learn the real interests of the actual buyers of eightyfive per cent of all advertised products... women... and to address advertising directly to them.

Today the selfsame principle of seeking out the very heart of a problem, in no matter what field, makes this company an acknowledged leader in those products which are most dependent on advertising...products in the highly competitive fields...in the United States and throughout the world.

New York • Chicago • St. Louis • Boston • Cincinnati • San Francisco • Los Angeles • • Montreal • Toronto • • London • Paris • Madrid • Berlin • Stockholm • Copenhagen • Antwerp • • Alexandria • Port Elizabeth • • Buenos Aires • Sao Paulo • Bombay • • Melbourne • Sydney • • Batavia • • Wellington • • Osaka

J. WALTER THOMPSON COMPANY



Marks the Spots





WRITE THE ENTRY-REMINGTON DOES THE REST

The REMINGTON Bookkeeping Machine performs every ledger posting computation in one operation, instead of several. Keeps every account in daily balance and proved. Saves time . . . saves money . . . and gets statements out on time.

LEDGERS PROTECTED AT "POINT OF USE"

Endless time is wasted carrying ledger records to safe or vault for fire protection. Remington Rand has brought the vault to the ledger. Snap the safety trigger of the SAFE-LEDGER File and your records are locked in their own fire protected cabinet.



where savings can be made IN HANDLING ACCOUNTS RECEIVABLE

Check the picture opposite with your own bookkeeping department . . .

There is scarcely a business in this country that could not reduce the cost of handling Accounts Receivable!

From 60 to 70% of all companies fail to get their monthly statements out on time, with a consequent interest loss of millions annually.

At least 30% of companies purchasing ledger equipment must replace it within a year . . . long before it is worn out.

Why this terrific drain on profits? Because of machines and equipment that do not fit the job . . . and fail to "mesh" properly with each other. Because responsibility is scattered.

Remington Rand has proved that this

waste is unnecessary and avoidable. Proved it with thousands of time- and money-saving installations.

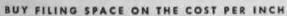
Remington Rand has no pet theories. No favorites to play. It has every known type of equipment . . . machines and systems . . . from which to build its recommendations. There is no other company that can assume full responsibility, from start to finish, for making maximum savings.

Call for the Remington Rand man. Or write

for fact-full literature on the handling of Accounts Receivable. No obligation.

TYPEWRITERS THAT

Remington was the original builder of writing machines. Fifty years of experience have taught Remington how to produce typewriters that make savings... by producing better work with less effort and by lasting longer. Special models are available for Accounts Receivable work, equipped with special keyboards and other time-saving features.



Remember that floor space is a charge against overhead. Many a bookkeeping department is wasting space by careless choice of files. LIBRARY BUREAU Steel Transfer Cases, for instance, offer 10% greater filing capacity. Made extra strong so that they can be packed full. Drawers never bulge or bind. Such cases make your inactive records as accessible as current files.

SOLVE THE PROBLEM OF CREDIT AUTHORIZATION

Many a bookkeeping system is rendered inefficient by the constant call for credit information. KARDEX solves the problem, either by supplying a separate visible record or by combining ledger and credit records together in the Kardex Vertical Visible. Colored signals flash the answer to every credit question—instantaneously.



Remington Rand · BUSINESS SERVICE EXECUTIVE OFFICES, BUFFALO... SALES OFFICES IN ALL LEADING CITIES



Efficiency Desk in STEEL!

The famed "Y and E" Efficiency Desk has for years been the standard of excellence in wood desks. Now in "Y and E" Steel Desks the busy office worker finds the same time and labor saving efficiency.

From the glare-proof, stain-proof top to the last detail of the bronze leg caps, these rugged steel desks are built for efficiency. The drawers accommodate a large number of card records for ready reference purposes. At a touch vertical file drawers roll in and out on ball bearing progressive slides. The annoying problem of desk locking is solved intelligently and simply. Numberless refinements, large and small, make a "Y and E" Steel Desk a true efficiency desk.

Steel Desk a true efficiency desk.

Built of best quality steel and beautifully finished,
"Y and E" Steel Desks last a lifetime and are always trim and attractive. Ask your "Y and E"
man or send for complete Catalog No. 3860.



A. R. McCOMSEY,
"Yand E" manin New
York City is one of
thousands of "Yand E"
men at the service of
business offices in all
parts of the country.

YAWMAN AND FRBE MFG. ().

528 JAY STREET :: ROCHESTER, N. Y. Esport Dept., 368 Broadway, New York, N.Y., U.S.A.

"FOREMOST FOR #82# FIFTY YEARS"

"Y and E" Steel Efficiency Desk.

each block of 50 cows in the barns is leased or even sold to an individual who assumes full responsibility (under certain general restrictions) and is paid a stated price for each pound of milk from his cows. This arrangement provides individual attention for each cow.

But here, too, there is central control. The animals are all under veterinary supervision and test by the central office, all feed is provided and all records kept by the central organization.

Even the milking is done centrally now that the new rotary milker, invented by Mr. Jeffers, has been installed. This is a circular, slowly revolving platform 60 feet in diameter, on which are built 50 stalls and stanchions. Each cow in turn walks out from an alleyway, steps on the platform, and the stanchion automatically locks her in the proper position. As the platform revolves, the cow is given a shower bath and rub down. Another minute and she passes before warm currents of air which dry her. Then she is inspected and the milking machine attached. During the remainder of the 121/2 minutes required to make one complete revolution, the milking is finished, the milk automatically weighed and recorded for each cow.

Effects many economies

THIS arrangement enables nine or ten men to milk 240 cows per hour. The laundering of 10,000 towels and 200 milking suits daily is eliminated. Numerous other advantages could be cited.

In improving the composition of milk some notable results have been achieved. A separate division under the direction of a nutrition expert takes charge of the problem of putting into the milk the proper biologic values. This process starts with the fertilization of the soil and the growing and curing of the crops. The dehydrated alfalfa gives the milk highly desirable qualities.

At present, experiments are under way to determine the best way to increase the vitamin "B" content. This can be done both by treating the feed with ultra-violet rays and by treating the cows.

The principal product of Walker-Gordon farms is certified milk. But it is the purpose of Walker-Gordon farms and of the parent company, The Borden Company, to utilize science and machines to produce the highest quality milk at the lowest cost.

The principles of a new and more profitable agriculture are being demonstrated on a practical scale in this New Jersey community.

Teletype handles bulky forms as easily as single sheets



For the Steel Sales Corporation it simultaneously makes four copies of an order at their office and six at a warehouse 81/2 miles distant!

Not only does Teletype send typewriting by wire, but by means of a newly-perfected sprocket feed, which keeps bulky forms in perfect alignment, one writing will now produce sufficient copies for all departments at either end of the circuit.

In the case of the Steel Sales Corporation's orders, for example, Teletype's ability to make enough copies for every department concerned has doubled the rush order capacity of that Chicago concern. "Formerly," says an official of the company, "we were obliged to limit rush orders to 20% of our business. Now Teletype has enabled us to raise the limit to 40%."

"Furthermore," he continues, "it saves us 20 man hours a day, which combined with the elimination of errors makes it a paying investment rather than an expense. Accuracy is extremely important to us, as a single mistake in the shearing of costly monel metal, for instance, might very easily cost us as much as several years of teletypewriter service."

Teletype has a capacity of 60 words a minute, and anyone who can use a typewriter can operate it. Errors in transmission are virtually impossible, as the operator has only to look at what she is typing in order to see what is being printed at the opposite end.

Teletypewriter service is invaluable between widely-separated offices and factories or warehouses, as well as within large offices and plants. For further information consult your local telephone company or write the Teletype Corporation, 1400 Wrightwood Ave., Chicago, U. S. A.



WHEN CAREFUL SELECTION IS VITAL TO SATISFACTION



Jewels for Adornment -Insurance for Safety

When you buy fine jewels for someone dear to you, you don't just telephone for a ring, a bracelet or a brooch—you take time for careful selection. Only so, can you be sure of satisfaction.

How much more important to make careful selection of insurance—your safeguard against tomorrow? Careful buyers choose CENTRAL insurance because its strength and reputation guarantee protection, fair adjustments and prompt settlements and its dividend assures substantial saving. Whether it be jewels or insurance, seek satisfaction in every investment. Be sure your insurance policies provide adequate protection at proper cost.

protection at proper cos

CENTRAL policies are written through local agents. For further information, let us send you the name of our nearest representative.

CENTRALS
DIVIDEND
SINCE 1921
HAS BEEN
30%



FIRE, AUTOMOBILE AND TORNADO INSURANCE FOR SELECT RISKS

"Business would be good if . . .



it were not for my competitors."

AND probably your competitors are saying the same thing about you. Meanwhile your private war goes merrily on, and all of you are fearful of "red ink."

The organization of a trade association in your industry might help—now is a splendid time to start it.

No law-evading schemes—just common sense application of the cooperative principle to your problems, backed by long experience and integrity.

Interviews in strict confidence—no obligation on the part of the inquirer.

Box 302, Nation's Business, Washington, D. C.

Converting Waste Into Net Profits

(Continued from page 44)
an under-floor conveyor. Since the cutting tools are continuously dripping
with oil, much oil is carried away. Formerly this was flung out of the chips
by centrifugal rotation. This required
15 machines and as many operators.

One day a waterspout flooded the floor. Then a steam pipe broke and its contents swept the conveyor. The tempest past, it was found that a great deal of oil had risen to the top of the water, and that the chips were entirely clean. Nature, abetted by steam, had pointed out a better way of doing the job.

Today the chips are propelled through a washer where boiling water cleanses them as the "twisters" never did. They pass to a waiting car. Oil and water descend to a tank where the oil floats on the top, then into a second tank and, finally, into a third where practically no water is left. A pump sends the oil into reservoirs to be returned to the machines. Twenty-five hundred gallons are salvaged every day.

Drills are worn short

OIL retards the wear on all manner of machine tools. Even so, tremendous speed and the necessary resharpenings gradually reduce them. Drills come in the length necessary to "reach into" a given operation. Eventually they become too short. Thereupon, sorters list them for a job requiring a shorter kind! Then worn still shorter, these and others go to the reclaim department at the rate of from 12,000 to 15,000 a day to be converted into pilot drills, counter sinks or center drills.

Peter is often dismembered to satisfy Paul. The worst of a half dozen rubber aprons is cut to restore the other five. The same applies to rubber trousers, coats, rain hats, or leather sleevelets.

Certainly salvage much more than earns its keep. Here in the sewing machine section is a rather amazing example of this. In a single corner, six operators, working eight hours, restore the asbestos gloves worn by all men who work with hot metal. Once all such gloves were thrown away. Now, four out of every five pairs are put back into stock at the rate of 1,100 pairs in a shift. By this saving the work of these half dozen men pays for the entire sewing machine department including wages of 48 men employed there!

Sales Manager or Cheer Leader?

BEHIND one door marked "Sales Manager" sits a man who is really just a glorified cheer leader. He gets up trick sales contests. He writes pep letters. He calls his men into the office and says, "Now boys, we've got to produce!" He tells them why they should work their heads off for dear old Jones Incorporated . . . but he can't tell them bow!

Behind another door marked "Sales Manager" sits a man who tells his salesmen what to do, when to do it, and just how it should be done.

Basically different men? Not necessarily! Pep and enthusiasm are important . . . but they were never a substitute for facts.

Acme Visible Records find the facts, signal them to your attention, and actually force action. You'll know more about a salesman's territory and customers than the man does himself. Acme shows what Customer Smith buys; what and when he should buy; what he bought last; what he buys from competitors and should buy from you; how frequently he turns each item.

And when you back your sales force up with that kind of information. they'll step right out and produce the kind of results you're after!

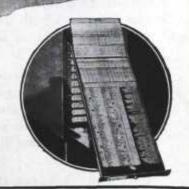
Acme Visible Records don't stop at stepping up sales. Their field of activity is as broad as business itself.

We've got a book called, "Business Success and Contributing Factors." No fireworks about it. Just a common sense compilation of Acme's general and specific abilities . . . the value of Acme in sales, production, inventory, stock, credit, accounting and every other department in any size or type of business. You ought to have this book, and you can have it now. It's free. Use the coupon.

Acme is the world's largest exclusive manufacturer of visible equipment Offices in Principal Cities

Acme Visible Records

PROFIT BUILDERS OF MODERN INDUSTRY



THE ACME CARD SYSTEM CO. 2 South Michigan Avenue, Chicago

Without obligation send me your book "Business Success and Contributing Factors."

Have an Acme Man call.

City_

Name

Firm Name

Address.

REDUCE PRODUCTION



SHAKEPROOF Lock Washers

T'S a wise executive who

checks up on his pro-

duction department and

sees for himself that Shake-

proof Lock Washers are

being used under every nut

and screw. They won't

spread-they won't tangle

and that means both time

and money saved on any

What's more, Vibration

cannot loosen Shakeproof's

hold. The twisted steel

teeth bite into both nut

and work surfaces and they

Give your product the

extra protection that Shake-

proof provides. A test will

prove how this positive

locking method improves

performance and reduces

production costs. Write

assembly line.



Type 12 Internal





Type 15 never let go.



Type 20 Locking Terminals U S. Paturt

Other parents for free samples today!

SHAKEPROOF Lock Washer Company

(Division of Illinois Tool Works) 2537 North Keeler Avenue Chicago, Illinois It's the Twisted Teeth that Lock

Are Individual Debts a Good Thing?

(Continued from page 23)

is basically the same as when a railroad buys one hundred locomotives to be paid for out of future revenues or floats a bond issue to finance construction. The same test of economic validity should be applied to one form of credit as to another. This test is the financial ability of the debtor to pay his debts.

When the implications of consumer credit are viewed from this angle the whole problem of unemployment is disclosed as even more crucial than is commonly supposed. Both in the field of investment and commercial credit the borrower looks to the income from property or from the sale of manufactured goods to liquidate his loan. In the case of consumer credit, the borrower looks primarily to salaries and wages. The entire structure of consumer credit. therefore, is based on the continuity of income from personal services.

Now it happens that the continuity of income from property and from manufacture has been stabilized to an extent yet unknown in the case of income from personal services. The growth of consumer credit has immeasurably increased the nation's stake in continuous employment.

The dangers of unemployment are magnified even further by the nature of consumer credit, particularly of instalment buying. If unemployment so reduces that income of the instalment purchaser that he cannot meet his payments, the goods he has bought are repossessed for resale in a market already overstocked.

Credit can help employment

ALTHOUGH consumer credit presumably aggravates the dangers of unemployment, it will also probably be found that in certain circumstances it has been a powerful force for increased employment and general prosperity. While this hypothesis needs factual substantiation, it has at least been freely assumed that our enormous volume of production and our relatively widespread employment at high wages have been due in large measure to the development of consumer credit. The argument may be summarized as follows:

Both high employment and high wages have been made possible only by mass production and scientific methods. But mass production could take place

only through mass distribution. This, in turn would have been impossible without comparatively large purchasing power. This purchasing power has been due in large measure to the extension of credit to the average individual.

Hastening recovery

SOME persons whose judgment is entitled to respect have said that an extension of consumer credit in times like these would hasten the recovery of business and reduce unemployment. The theory has been advanced that if the instalment finance companies would grant purchasers from two to four more months to pay for goods, our purchasing power would be increased from 50 to 100 million dollars a month. I merely state the argument for what it is worth.

After hearing the opinions of a dozen chief executives of the leading agencies of consumer credit and reviewing their records of operations for the past two years, I have the following broad conclusions which I offer merely as straws in a heavy gale.

1. Consumer credit agencies seem to have weathered the depression so far without serious impairment. Apparently, the volume of credit outstanding has decreased in much the same ratio as the volume of retail trade, but the ratio of losses to credit extended has not markedly increased. Although instalment repossessions have been doubled in volume, they still represent an insignificant proportion of the total goods sold.

Figures from the four leading automobile finance companies show that, for the first half of 1930, three-tenths of one per cent of their instalment obligations receivable were 30 to 60 days past due as against two-tenths of one per cent in the same period of 1929. The value of repossessed cars, however, doubled in 1930, but the amount last year was so small that even with the increase this year, the figures are not ex-

2. Consumer credit has probably not been a major cause but it may have been an aggravating factor in the present unemployment and depression. All those whose views I have canvassed, with one exception, maintain that overextension of consumer credit cannot be held primarily responsible for our present business difficulties. After all, the present depression is not confined to the United

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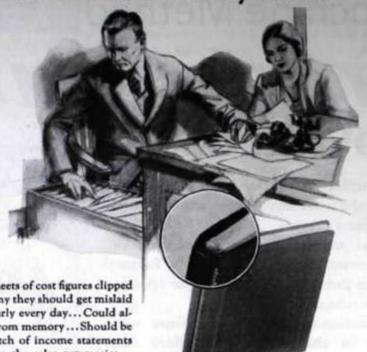
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☐ 266 Places for Visible Equipment States. It includes countries where consumer credit is comparatively insignificant. Then, too, in spite of the size of the consumer credit structure, less than one-tenth of the national income is mortgaged in this way.

Certainly it would seem that, had there been a marked overextension of consumer credit, the past 12 months would have shown a far greater proportion of losses and failures than the records disclose. A structure that was basically unsound would by now have shown serious signs of weakness.

3. In the case of large numbers of individuals, consumer credit is probably abused. Serious doubts as to the wisdom of consumer credit in certain quarters are raised by two lines of evidence. First, the exceedingly high proportion of small loans which are apparently made to liquidate previous consumption indebtedness, and, second, the rapid increase of individual bankruptcies among wage earners.

A recent study by Dr. Ryan shows that 88 per cent of the loans made by 80 representative personal finance offices were used to pay off or reduce previous indebtedness.

Has credit caused bankruptcy?

A STUDY of bankruptcy figures made during the past few months by Rolf Nugent, assistant director of the Department of Remedial Loans, of the Russell Sage Foundation, shows that wage earners' bankruptcies per hundred thousand of the population increased from 37 in 1918 to 96 in 1929.

Mr. Nugent reports, however, that he found no cases where bankruptcies resulted from the overextension of consumer credit by legitimate agencies selling articles of genuine value.

Summing up the stray bits of evidence at hand, one is tempted to rest on the hypothesis that consumer credit, like other forms of credit, may be a stimulant or a depressive according to its use. Like a tonic, if administered wisely and in moderation it seems to improye the health of the business organism and to reduce unemployment, but it carries grave dangers of abuse.

The tonic analogy can be carried still further. The medical profession has often made its greatest discoveries by trial and error checked up later by thorough scientific investigation. Consumer credit has already been tried out in practice. Enough is now known about the results to indicate both its promise and its menace. The time has come for the economist to analyze the situation for intelligent business strategy.

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When the detour signs go up, the contractor on the job must work fast. Taxpayers temporarily cut off from tourist business, residents inconvenienced by the diversion of bus and supply truck routes, as well as the tourists themselves are impatient of delay. I Leading the activity back of the detour sign are Thew Lorain machines... power shovels ripping up old pavement or

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Throwing Light on the Sales Tax

(Continued from page 31) Virginia and Pennsylvania less than one per cent of gross tax needs are raised through forms of the sales tax.

Will the consumer pay the sales tax? It must be passed on to the consumer or be absorbed by the merchant. Paul H. Nystrom, professor of Marketing, School of Business, Columbia University, finds that out of 145 merchants only 18 remain in business after 12 years, and that at the end of each year 25 per cent of those who started the year have passed out of the picture.

The retailer's margin of the profit today is such a small percentage of his sales that a one per cent sales tax would leave him with not only no profit but, in many instances, an actual deficit.

Consumers will pay

IT IS apparent, therefore, that, unless the merchant wishes to reduce operating expenses by cutting down his working force and shaving salaries and wages, or pares his advertising appropriation to the bone, he must quickly devise means of passing a sales tax on to his custom-

Certainly none of us wish to reduce the number of our employees or to cut their pay. Such action would tend to more unemployment and to a lowering of the standard of living.

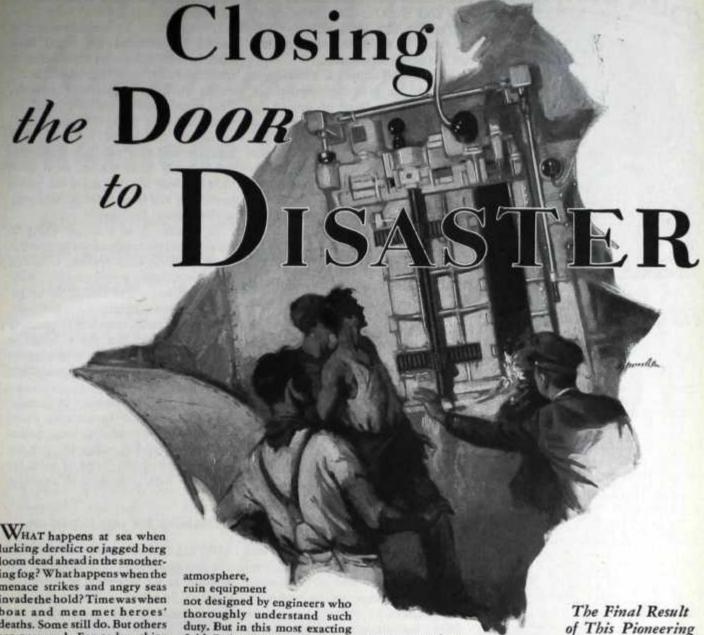
Neither do we wish to reduce our advertising appropriations because this would most certainly mean fewer sales and less revenue, which, in turn, would mean fewer employees, a rising ratio of other expenses to sales, and less distribution.

This, in turn, would result in decreasing production, with the same consequential effect upon that branch of industry-a vicious circle.

If the tax is passed along to the consumer it becomes a consumption tax. It would increase the cost of living. It is no simple matter to pass on a sales tax. Those of us who come in contact with the public know that there will be widespread discontent with a tax which visibly increases the cost of so many necessities.

To preserve the good will of his customers the merchant must and will charge the amount of the tax separately. For example:

One dress, \$15. State Tax 15 cents. Total price \$15.15. One blanket, \$6. State Tax 6 cents. Total price \$6.06. A TRAVELS TO THE PROVING GROUNDS OF CUTLER-HAMMER EXPERIENCE



lurking derelict or jagged berg loom dead ahead in the smothering fog? What happens when the menace strikes and angry seas invade the hold? Time was when boat and men met heroes' deaths. Some still do. But others are prepared. For today, ships are divided into watertight compartments, entered by great motor-operated doors. If collision comes, a switch beside the door or far above in the pilot house is pressed-the doors clang shut-disaster is imprisoned in one small compartment. The electric mechanism controlling the doors is one form of Cutler-Hammer Motor Control. And that means something to all users of electric motors.

Here's why:
Aboard ship, electrical equipment stands tests more severe than any imposed on land. The lurch and pound of heavy seas, the harsh service, even the salt

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Every special problem teaches lessons impossible to learn elsewhere. And this tremendous fund of knowledge explains the superiorities of Cutler-Hammer standardized Motor Control. It is fathered by three decades of special engineering and standardized to fill all common needs for saving production time, for protecting motors, equipment and workmen... for blocking disaster which, in one

form or another, constantly threatens wherevermen and motors work.

Insist upon Cutler-Hammer Motor Control... the composite result of experience covering every motor control problem confronted by Industry for three decades. It is built into leading motor-driven machines . . . recommended by conscientious motor manufacturers for the motors they install ... and stocked by established electrical wholesalers in all principal centers. CUTLER-HAMMER, Inc., Pioneer Manufacturers of Electric Control Apparatus, 1251 St. Paul Avenue, Milwaukee, Wisconsin.

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With every flame in the plant controlled absolutely and entirely by The Industrial Carburetor, there's no "monkeying" with burners, no lost time, no wasted gas, no peaks and valleys in temperature and pressure charts.

Look into this Industrial Carburetor. Discover the savings it can make in your plant on gas alone. A Kemp engineer is at your service now, without obligation. For detailed information, have your secretary return the coupon below.

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man's shirt, \$2.00. State Tax 2 cents. Total price \$2.02.

Bearing in mind that a comparatively small number of retail merchants in New York State handled approximately 144 million individual sales in 1929, the extent to which this tax may irritate the public is apparent.

In proportion to income a retail sales tax, passed on as a consumption tax, tends to burden those of smaller incomes much more heavily than those with larger incomes. Individuals with low incomes devote a larger proportion of their income to consumption expenditures than do large income individuals. Therefore, the burden of such a tax rests most heavily on those least able to bear it.

A handicap on distribution

WILL a sales tax interfere as little as possible with the development of industry and business? Even passed on to the customer and consumer, the transfer is slow and difficult in the highly competitive retail field, with the added disadvantage of alert competition from outside the state. In the meantime, retail establishments would have to absorb the tax themselves, and, since their average profits are small, many would be operating at a loss and many would have to go out of business.

To introduce a plan of taxation which not only adds another tax burden but which makes a tax collector out of the retail merchant would seriously menace our commercial and economic life. Most economists are convinced that the problem of the present and of the coming generation is to improve the machinery of distribution.

Many economists and practically all producers claim that distribution is our greatest economic weakness. A sales or consumer tax of any type is a definite handicap to this factor in our economic organism. Distribution must be strengthened in the next decade. This cannot be accomplished if it must be handicapped at the same time.

Can a sales tax be collected at a reasonable cost? Collection might appear to be simple. It presents, nevertheless, serious administrative problems. Chief among these are the problems of determining who should be retail taxpayers, the number of returns involved, and the question of retail sales made to business concerns.

Would sales of equipment, office and other supplies to business concerns fall under the tax? Would flour and other commodities, purchased by a baker or a restaurant, or sugar purchased by a

confectioner, be taxed? Wholesalers and manufacturers also make sales at retail, in some cases as an established part of their business, in other cases, only incidentally.

If retail sales to business concerns should be exempted and retail sales made by wholesalers and manufacturers taxed, the sellers would no doubt be required to report such sales separately. This would involve multiplicity of accounts and open paths to evasion. Difficulties of calculation, involving construction and interpretation of the law, would surely arise, perhaps even more than has been the case under the excess profits tax, and even under the relatively simple income tax laws.

In practice it is a simple thing to record sales, yet many business concerns have defective sales records. Checking up these concerns would require a large number of examiners. Difficulties of administration would arise through the incentive to arrange transfers of property and merchandise in a way to avoid or defer actual sales. Such arrangements would not be a wholesome development in the business world.

A retail sales tax means a large number of insignificant tax accounts whose checking and supervising must be exceedingly expensive compared with the revenue derived. All forms of sales tax call for a high proportion of small returns.

Gasoline tax easy to pass on

ADVOCATES of a sales tax invariably cite the success of the sales tax on gasoline as an argument in its favor. Gasoline, by reason of uniform distributive methods, can be accurately taxed at a comparatively few responsible wholesale points. Evasions are quickly and easily detected. Gasoline cannot be sold promiscuously by thousands and tens of thousands of dealers as is true of almost every other known item in common use.

This special tax is practically a nation-wide tax, affecting dealers and consumers everywhere in much the same manner. It is usually a high tax, amounting to from ten to 35 per cent of the normal resale price, and, therefore, can be passed on to the consumer in every case with a minimum of administrative difficulty. The amount of revenue derived, as compared with cost of collection, justifies its imposition.

Furthermore—and a point important to merchants—it is not so obnoxious to the consumer because he realizes that the money he pays in gasoline taxes is used to improve the comfort and safety

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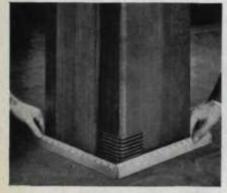
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Westinghouse Radio (w)



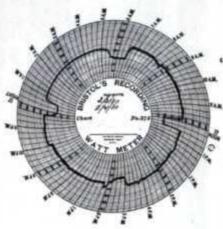
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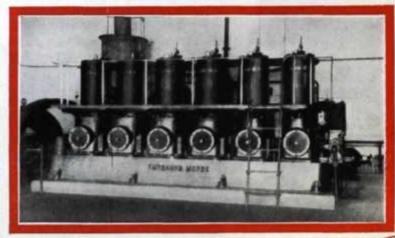
replaced purchased power with Diesel engines, Fairbanks-Morse Diesels were chosen. The performance of the Fairbanks-Morse Diesel in this plant is indicative of the

industrial trend toward this source of reliable, low-cost. clean power.

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of his motor operations, and to reduce the depreciation on his motor vehicles.

The New York legislature has mentioned real estate particularly as in need of relief because it bears a disproportionate share of the tax burden. Assuming that this is true, and that relief must be given, I still believe the situation would be made worse by transferring any portion of real estate's tax burden to a general sales tax. The taxes on real estate are in no way concealed. The owner knows it when the bills come around.

On all lands that are improved and under lease the tenant indirectly pays the real estate tax. Most of these tenants are families with small incomes who, in the event of a general sales tax, would find their cost of living greatly increased that real estate might be relieved of a comparatively small amount. I have already suggested that 30 million dollars would be a liberal estimate of the amount that could be derived from a retail sales tax in my state.

Many disadvantages

SUMMARIZING the reasons which cause me to regard a sales tax as vicious, futile legislation:

- 1. A sales tax is class legislation. It taxes commodities but doesn't touch the doctor, lawyer, architect or accountant. Why should a man making a living out of a store be taxed on the service he renders while the professional man, also in business, remains exempt?
- A sales tax is difficult and expensive to administer.
- The belief that a sales tax can be easily collected by passing it along to the consumer is a fallacy.
- A sales tax passed on to the consumer would soon irritate him to the point where its repeal would be demanded.
- A general sales tax must become a pyramiding tax, because of the difficulty in defining an ultimate sale, as well as the place or places where the tax should be imposed.
- 6. A sales tax is a tax on volume, not on profits and, therefore, must be paid though the business is actually losing money. It is not based on ability to pay, and is effective in times of depression as well as in periods of prosperity.
- 7. The sales tax violates completely the basic theory that taxation should fall on those who can best afford to pay. The average wage earner must spend the greater portion of his income at home to obtain the necessaries of life, and cannot curtail his buying.

8. A sales or production tax gives a

manufacturer outside the state an unfair advantage over home manufacturers. It would limit manufacturing within the state borders, which, in turn, would reduce wages, then retail sales and profits, and ultimately the income of the state itself.

A sales tax places upon necessities an unfair proportion of the tax burden.

Extravagance in taxing

- A SALES tax tends to promote extravagance. It has no limitations, and once enacted, there is nothing to prevent increasing the rate when additional funds are needed.
- A sales tax would give an unfair advantage to mail-order houses outside the state, since New York cannot tax interstate commerce.
- A sales tax would undoubtedly tend to drive business out of border cities.
- 13. The sales tax is a state pabulum for economic ills. It was advanced in the days of Adam Smith and is vigorously opposed by the doughty black-smith-economist in his "Wealth of Nations." It was considered seriously during the Civil War but failed to gain support. In 1917 and 1918 a sales tax was proposed as a substitute for the federal excess profits tax, but again failed to win congressional support. It is significant that many of the original proponents of this method of raising revenue have long since withdrawn their support.

Retailers oppose the sales tax

IN CONCLUSION, I may say that I do not know a business man of practical ability, big or little, who has studied this question and is not resolutely opposed to this tax.

Among those who are outspoken in their resistance to such legislation are J. E. Pridday, president of James McCreery & Co.; Bernard F. Gimbel, president of Gimbel Bros., Inc.; S. F. Rothschild, chairman of the board of Abraham & Straus, Inc.; B. Earl Puckett, vice president of Frederick Loeser & Co., Inc.; Grover A. Whalen, general manager of Wanamaker's New York store; Michael Schaap, president of Bloomingdale Bros., Inc., and many more retail leaders of almost equal note.

What the retail business of the United States needs right now and is going to need for some time is encouragement, not new burdens. We have enough to contend against without spending vital energies trying to protect ourselves from our own government.



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AMERICAN



FILTERS

On the Business Bookshelf

HE CUMULATIVE effect of symposiums on a book reviewer is bad. Very bad, we might say. One, once in a while, does no serious damage; but if a reviewer gets several in one month, their chief fault, lack of coordination, stands out badly.

In the past few days we have had three symposiums for consideration.

It is quite possible to collect a number of short articles and make a book of them, but the inevitable lack of unity is harmful to the work as a whole. It is possible to choose a subject, parcel out its subdivisions, and produce a symposium with unity of theme, but the unity will not be absolute and the various writers will not have the same interest in the treatment that one or two authors would have in their brain-child. It is possible by so treating a subject to hide the theme, because each writer considers only his particular subdivision and the editor cannot pull the collection together to show a unified theme -you cannot see the forest for the trees.

NOT so many years ago, business was done on a basis of barter or cash. Now the great majority of it is done on credit.

The annual volume of business in America is rapidly growing toward a trillion dollars—our monetary gold supply would have to change hands about three times a day to pay it.

This large business volume is built almost entirely on credit. Maxwell Droke has discussed this interestingly in "Credit—the Magic Coin of Commerce," a book viewing credit from the standpoint of commercial concerns granting credit.

THE increasing use of minerals and the interdependence of the countries of the world for complete mineral supplies makes a discussion of "World Minerals and World Politics" particularly timely.

In brief, the author says the most important thing facing the mineral industries is politics. Mineral resources, possible location of undiscovered ore,

¹Credit—The Magic Coin of Commerce, by Maxwell Droke. Business Letter Institute, Inc., Indianapolis.

World Minerals and World Politics, by C. K. Leith, McGraw-Hill Book Company, Inc., New York, \$2.



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MACHINE SCRUBS



When writing please mention Nation's Business

economic trends in the use of metals, but politics is in general a great unknown.

THE Chandler Cyclopedia' is designed to show the buyer and user what and how to buy. It gives, in this first volume on wood, instructions as to the characteristics, uses, advantages and disadvantages of the commercial woods of this country with some brief notes on the more important imported woods.

The information, according to a statement of the publisher, was culled from hundreds of sources by an expert in the field, Phillips A. Hayward, technical consultant to the U.S. Department of Commerce. It is, we believe, quite unbiased in its presentation of the merits of various woods.

Both the expert and the layman will find it valuable, the first finding it a valuable reference, the second finding it a practical guide in choosing between different woods and different grades of the same wood.

TRANSPORTATION expenses have been found to run from 10 to 25 per cent in typical businesses-from two to 98 per cent in extreme cases. The establishment of traffic management departments to guard this item of expense has

been found by many to pay for itself can all be estimated and allowed for; easily, and in many businesses it has paid for itself several times over.

> The Bureau of Foreign and Domestic Commerce sent out a questionnaire seeking to find typical ways of running traffic departments and typical savings made in transportation costs by having such costs scrutinized carefully.

Mr. Butterbaugh has compiled a careful report' on the results of the questionnaire. It will be interesting, we believe, to traffic departments established, and to those firms contemplating the establishment of traffic departments.

MORE than 1600 laboratories are listed in the 1931 edition of "Industrial Research Laboratories of the United States" as compared with approximately 1000 listed in the 1927 edition.

Wood-Lumber and Timbers, by Phillips A. Hayward. Volume 1 of the Chandler Cyclopedia. Chandler Cyclopedia, New York, \$10.

Industrial Traffic Management: A Survey of its Relation to Business, by Wayne E. Butterbaugh. Bureau of Foreign and Domestic Commerce, U. S. Department of Commerce. Government Printing Office, Washington, 30 cents.

"Industrial Research Laboratories of the United States. Fourth Edition, revised and enlarged. National Research Council of the National Academy of Sciences, Washington, D. C., \$2.

Recent Books Received

Economic Control of Engineering and Manufacturing, by Frank L. Eidmann. McGraw-Hill Book Company, Inc., New York, \$4.

Bank Administration, by James B. Trant. McGraw-Hill Book Company, Inc., New York, \$3.50.

Business Administration, by Willis Wissler. McGraw-Hill Book Company, Inc., New York, \$5.

Low Pressure Selling, by James A. Worsham. Midwest Press, Bloomington, Ill.

Racial Factors in American Industry, by Herman Feldman. Harper & Brothers, Publishers, New York, \$4.

Reducing Seasonal Unemployment, by Erwin S. Smith. McGraw-Hill Book Company, Inc., New York

Statutes and Decisions Pertaining to the Federal Trade Commission, 1914-1929, compiled by Henry Miller. Govern-ment Printing Office, Washington, \$2.

Building and Loan Annals 1930, U. S. Building & Loan League, Chicago, \$10.

Argumentation and Debate, by Carl G. Miller. Charles Scribner's Sons, New

Organization Engineering, by Henry Dennison. McGraw-Hill Book Company, Inc., New York, \$2.

Management Problems, edited by G. T. Schwenning. The University of North Carolina Press, Chapel Hill, N. C., \$2.

Commercial Survey of the Pacific Southwest, by C. R. Niklason, Bureau of Foreign and Domestic Commerce, U. S. Department of Commerce. Government Printing Office, Washington, \$1.85.

The Farm Board, by E. A. Stokdyk and Charles H. West. The Macmillan Company, New York.

Certified Public Accountant Laws of the United States, edited by A. P. Richardson. The Century Company, New York, \$3.

An Economic History of Australia, by Edward Shann. Cambridge University Press. Cambridge, England.

The Trusts and Economic Control, by Roy Emerson Curtis, McGraw-Hill Book Company, Inc., New York, \$4. The Arizona Year Book 1930-1931, com-

piled by Forrest E. Doucette, Arizona Year Book, Inc., Phoenix, Ariz.

Publication and Advertising Agency Problems, by A. J. Slomanson. Lloyd Publishing Company, New York.

Writing for Profit, by Donald Wilhelm. McGraw-Hill Book Company, Inc., New York, \$3.

The Family, by Edward Byron Reuter and Jessie Ridgway Runner. McGraw-Hill Book Company, Inc., New York, \$4.

American Public Health Association Year Book 1930-1931. American Public Health Association, New York, N. Y

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ROCHESTER Union Trust Company
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LOCKPORT Niagara County National Bank & Trust Co.

The Business Man's Health

THE average business man, studies of the United States Public Health Service indicate, maintains just average health. Professional men and farmers rank above him in health, while workers in skilled trades rank below. These studies, for the first time, definitely disclosed that a man's job has a clear relationship to his health.

The survey which led to these findings was made by Edgar Sydenstricker, a statistician, and Rollo H. Britten, of the Public Health Service, and it involved a study of the physical records of more than 100,000 insured men. These records were taken from the files of the Life Extension Institute, and represented policyholders in more than 40 life-insurance companies.

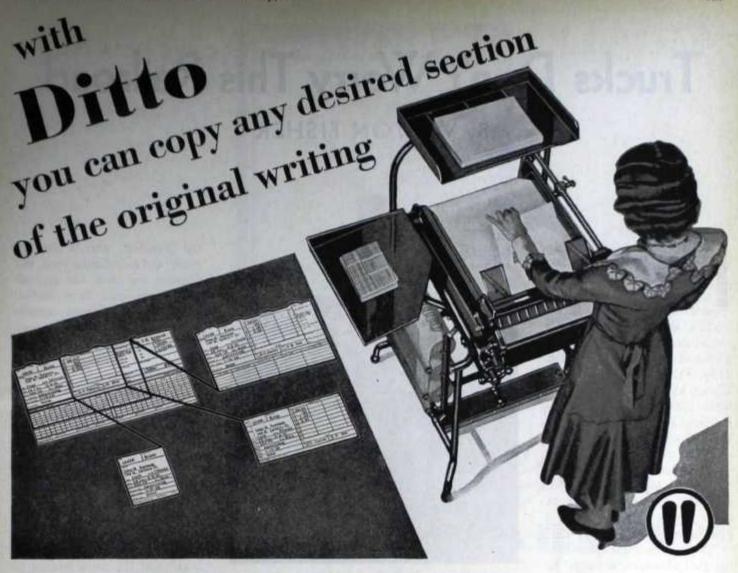
Farmers, although the most healthy of the four groups as a class, were found to have a much higher rate of impairment of the teeth, stomach and abdominal conditions and genito-urinary systems than any of the other groups. On the other hand, farmers suffer less than other groups from diseases of the eye, ear, nose, throat, heart and circulatory system.

Professional men, it developed, have a high percentage of vision defects, most of which were corrected by medical treatment, and are subject to nervousness, skin diseases and mastoid troubles. Their hearing, teeth, arteries, and stomachs were better than those of any other class.

No ailments above average

THE rates of impairment among business men were in no instance above the average, and were below average in the case of teeth and respiratory ills. In most ailments they rank along with the average for the entire population.

Workers in the skilled trades stood out distinctly as having a larger share of physical impairment than any other occupational group. Their rates of impairment were found excessively high for eye and ear, teeth, heart and many other miscellaneous conditions. Specifically, the records revealed high percentages of uncorrected defective vision, defective hearing, septic teeth and other teeth impairments, colds, bronchitis, enlarged hearts, stomach and abdominal ailments, backache, insomnia and varicose veins in this group. Its members are large users of patent medicines.



TS versatility...that's the amazing thing about Ditto! Straight-run duplicating is only a fraction of its usefulness. Ditto copies all or any desired part of the information written or typed on the original. This one feature alone enhances the value of Ditto in its universal application to billing and invoicing, requisition and purchasing, production control, card index and other existing systems.

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Trucks Don't Worry This Railroad

By WILTON FISHER

operating buses and trucks along highways paralleling its right of way, the Cassville and Exeter Railroad, the world's shortest independently owned steam railway, still makes its round trip of ten miles twice daily. From Cassville, Mo., to Exeter, Mo., and back again, the little 1884-type Baldwin locomotive hauls the huge freight cars, blissfully unaware that it has been rendered obsolete by the short-haul trucking lines.

True, as Mr. David Dingler, president and engineer admits, the passenger traffic isn't what it used to be.

"But we never did make anything on passengers anyway," he grins,

This tiny road provides a characteristic example of the lengths to which a town will go in preserving its economic existence. When the St. Louis-San Francisco Railway, or the Frisco

as it is more familiarly known, decided to build its main line through Exeter instead of Cassville, it left the latter town five miles from the nearest shipping point. At that time, some 25 years ago, it was an almost fatal blow to the little town.

But if the railroad wouldn't come to Cassville, then Cassville would go to the railroad. A group of enterprising Cassville citizens constructed the C. & E. to connect with the main line of the Frisco. The road now has been in uninterrupted operation for more than 20 years, preserving its independence through the inability of a larger company to operate the short line at a profit.

Not under I. C. C. regulations

DUE to a ruling of the Interstate Commerce Commission, no railroad less than five miles in length comes under its supervision, and the 4.9 miles of the C. & E. falls just short of that mileage. If a larger road should purchase the C. & E. it would then automatically come under the supervision of the Commission and that would necessitate an increased office force, union operators for the locomotives, more rolling stock and passenger coaches and other costly changes which would make profitable operation impossible.

At present the entire system is run by six men. There is



Mr. David Dingler is president, engineer and roundhouse crew of the C. & E.

the president, who is also engineer and roundhouse crew, one fireman, one clerk and general-office man, and three section hands. The equipment consists of the old locomotive, one combination tender and flat car and the 4.9 miles of roadbed. The C. & E. owns no freight cars, using those of other roads.

The road does not even possess a Y or turntable at either end of its tracks. The engine hauls the cars to Exeter, cuts them out on the Frisco right of way, picks up the cars for the return trip and backs to its starting point. As the return trip is all down grade the engineer has only to release his brake and the train returns to Cassville of its own accord.

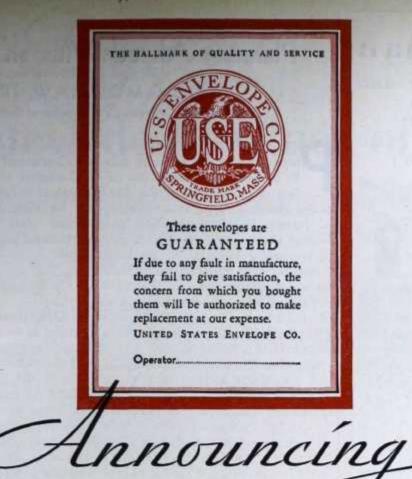
Mr. Dingler also, by an ingenious arrangement, uses the

★ THE Cassville and Exeter Railroad is said to be the world's shortest independently owned line—yet it successfully competes with motor trucks for short-haul freight. In its very shortness, in fact, lies the principal reason for the line's success. For more than 20 years now it has been in uninterrupted operation

brakes on the freight cars instead of those on the locomotive, saving wear and tear on the brake shoes of the Baldwin. Small items, true enough, but the road owes much of its successful operation to attention to such details.

The C. & E., while retaining its own personality, has a working agreement with the Frisco whereby it is regarded as a division of that road and receives a percentage of the freight on the entire haul, rather than the comparatively small tariff its less than five miles of length would produce.

So, under the protection of the Frisco and the peculiar advantages of its position, the C. & E. safely ignores the inroads of bus and truck, and the old Baldwin asthmatically grinds out profits for the stockholders year after year.



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Planning Ahead Wins an Industry

By B. C. MOOMAW, JR.

Secretary, Covington, Va., Chamber of Commerce

better site for his gristmill than he realized. The location was the hub of that section of the Alleghany Mountains, lying at the junction of Jackson River, Potts Creek and Dunlap Creek, where is now the city of Covington, Virginia. All are large streams of pure mountain water, ideal for manufacturing purposes. The wide stretches of bottom lands made an ideal site for a town. The townspeople, long after Peter Wright's time, recognized these natural advantages.

One of modern Covington's farsighted and progressive business men a few years ago, got together a group of his friends and associates and said to them:

"Covington's future growth depends on industrial development. The Rine-hart farm at Potts Creek will someday be the location of a new plant if we take the proper steps. We must control Potts Creek and enough land on the Rinehart farm for this plant. It will take \$10,000 to do it. I will put up \$1,000 if each of you will do the same. Then, when we are able to get a plant here, we will have the deal in shape to deliver."

The land on both sides of the mouth of Potts Creek was purchased.

The leader of the movement died. A chamber of commerce was organized.

Advantages for manufacturing

THE Chamber's surveys showed Covington's principal industrial advantages to be its climate, good coal at low freight rates, an abundance of electric power at reasonable rates, water suitable for manufacturing purposes, good factory sites, efficient transportation and native American labor of pioneer stock.

The Chamber decided that a rayon plant would be most likely to succeed in Covington. Soon afterward the Chamber heard that the Industrial Rayon Corporation of Cleveland, Ohio, was contemplating a southern plant. Telegrams brought a list of the company's requirements for the desired location. The Chamber decided that these could be met.

Telegrams outlining the situation were sent at once to high officials of the Chesapeake & Ohio Railway, which serves Covington, to Harry F. Byrd, then governor of Virginia, and to the state's principal chambers of commerce.

Covington expected other Virginia chambers to help in getting the industry for Virginia. Every chamber addressed wired the Industrial Rayon Corporation urging the selection of Covington.

. Special survey made

MEANWHILE the Covington Chamber supplied in detail all information asked by the corporation. This required a special and intensive study of all conditions affecting the assembling of raw materials, the manufacture and distribution of rayon, the welfare of the people employed, state laws affecting corporations, and other factors. The survey was made and the facts presented in condensed form, liberally illustrated with actual photographs.

The corporation almost at once narrowed its choice of location for the new plant to Covington and a large southern city. The Covington Chamber learned that the Industrial Rayon engineers favored the other city. A conference with them disclosed that Covington was eminently satisfactory from all standpoints save those of labor and housing. Again the Chamber launched a survey. this time a house-to-house canvass, and convinced the corporation that there was ample labor in Covington and surrounding country to meet all requirements. A housing corporation was formed, under the inspiration of the Chamber and it contracted to house laborers moving into Covington to work in the plant.

The Chamber arranged to have the city streets, water system, and other facilities extended to the plant site. The factory was won.

With the construction of the plant, there ensued the usual activity incident to a rapidly growing town. Transient real estate men tried to get a foothold to boom the town, but were thwarted by the Chamber and property holders.

Covington's present problems are those of wholesome growth, not of boom. And this same wholesome growth has inspired new confidence and zeal in the citizens. It has proved that careful planning, cooperation, and hard work can accomplish results.

The Biggest

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Art Metal

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HERE'S the William Pennanother of the beautiful new designs in the 1931 Art Metal line.

Here's a desk that is specially designed for conservative tastes. Its lines are impressive, dignified. And its finish—even to the Artolin top—is a perfect reproduction of the exquisite graining of the finest walnut.

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MODERN TIMES AND PLACES

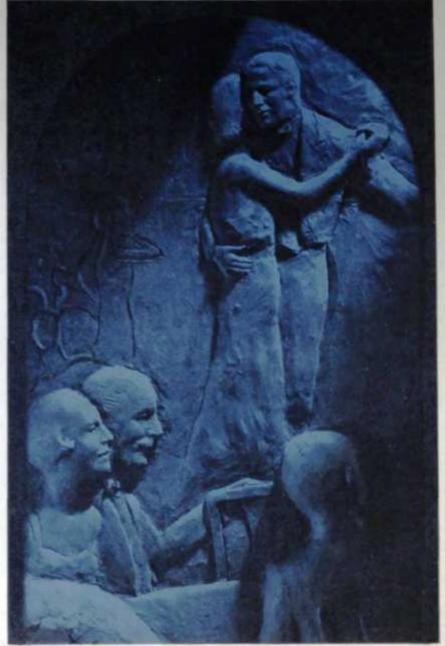


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Keeping Step with Business Changes

(Continued from page 41)

the store's requirements and then the wholesaler would go back to the manufacturer and do his part of the job.

"Today the big stores have less and less to do with the wholesaler. Concerns like R. H. Macy & Co., Saks & Co., Stern Bros., Altman's, Lord & Taylor, Bonwit Teller, Franklin Simon, Best's, Gimbel's—all big businesses of that nature—know exactly to a minute how their stock stands and what they will require on a given date. They know precisely from day to day—even from hour to hour, what they have sold and what they have on their shelves.

Dresses were not fashion goods

"THEY operate scientifically on past experience. It's as precise as the multiplication table. In most cases, they go straight to the manufacturer and producer of whatever article they may need, and in many cases they even manufacture the goods they sell.

"There are many reasons for this striking evolution. The powerful effect of changing fashion has been a most important cause. In my younger days the ready-to-wear women's business hadn't developed. People were not so fashion-conscious. I might even say most people were not fashion-conscious at all.

"Very well-to-do women had two or three dresses made to order for a season, for winter, spring, summer and fall. When I say well-to-do women I mean that many rich women followed this custom. They could have had hundreds of dresses but they simply had no style urge to do so. The same thing was true of shoes. Most people had two or three pairs of black shoes—there were no tan or colored shoes until about 1890—and women saw no reason to have any more.

"Most articles were standard and staple and easily and conveniently handled by the wholesaler. He himself could keep large stocks of certain merchandise on hand without fear of loss. Today fashion is so fickle that a wholesaler venturing to carry large stocks of a certain kind of shoe or frock might be ruined almost overnight. From such uncertainties he had to withdraw in his own protection and it became necessary as well as convenient, timesaving, economical and efficient for the merchant to go straight to the manufacturer and frequently even become a manufacturer himself.

Driving out the middleman

"IN THESE days women, with a world full of beautiful things to choose from and with minds that have become thoroughly impregnated with fashion consciousness must have, if purses permit, many dresses a year, dozens of them, scores of them. Instead of two or three pairs of shoes they must have all kinds and colors of shoes. Shoes must match dresses. Everything must be in tone.

"The middleman can't keep up with that sort of thing. Fashion has driven him from the big city to the small towns for business. That is where his field mostly lies today. Firms like the



FRANC LESLIE'S ILLUSTRATED NEWSPAPE

Even in those days traffic cops had their difficulties with the speeders on fashionable drives

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both INTRICATE

AND OPEN CUTTING

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Fewbelieve us when we tell what the Triplex will do—until they see it. For large, thicklyfoliaged grounds, it is the only logical answer. Ask about it.



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413 W. Chicago Avenue, Chicago, Illinois 161 Vester Street, Ferndals (Detroit), Mich.

237 Lafayette Street, New York City 273 Boylston Street, Brookline, Mass.

Dealers in all principal cities

The New IDEALS



THE HIGH SPEED MACHINE FOR ALL FIGURE WORK



Isn't it time to look into office costs?

WHEN business is booming sales increasing and profits mounting, not much attention is paid to ways of reducing office costs. Such periods foster unnecessary costs, which grow and expand unnoticed.

But when the turn comes when demand falls off and trade declines, cost-consciousness is quickened and costs are scrutinized more closely.

Isn't this an opportune time to check up on costs?

There is your figure work—the Billing, Inventory, Payroll, Costs,

Sales Distribution
—always an important factor in office
expense.

What is your cost on these operations?

If it is not down to the low levels set by the Comptometer on the same kind of work in thousands of other offices, it is certainly too high. And, if too high, it is equally certain that Comptometer speedwith-accuracy will reduce it with no impairment of efficiency.

It will cost you nothing to make sure of your position.

A short analysis of your figure work will determine it, and a working test with the Comptometer on each operation will prove it. A Comptometer man will be glad to explain just how the analysis is made—the simplicity of it—and

he will esteem it a privilege to make such an analysis and test without any obligation on your part.

FELT & TARRANT MFG. CO. 1712 N. Paulina St. CHICAGO, ILL.





If not made by Felt & Tarrant it's not a Comptometer Only the Comptometer has the Controlled-Key safeguard to drive up in their carriages and do their own shopping. It was, I suppose, something of a diversion in times when there were not many things to vary the placid routine of life. I have waited on members of the Gould, Vanderbilt, Riker and Astor families myself, and I daresay Mr. McCutcheon did also as other big merchants have done.

"I know that when Jay Gould's house-keeper ordered a large and expensive piece of Irish table linen I got his address wrong and was for delivering the purchase to an address in Third Avenue rather than Fifth. Fortunately one of the clerks noted the mistake and corrected it. Now the city is so big, the crowds so enormous, the times so tense, that business has lost part of the old-time, gracious, friendly, almost neighborly character it once enjoyed.

"One thing has not changed and never can change. That is the necessity for a merchant to study the wishes and requirements of his patrons and be incessantly concerned to satisfy them fully. The merchant who does thatthe specialty merchant, at least-need not fear chain stores or mergers. There is a great field into which the chain store cannot readily enter, that is the field which has to do with individuality and style and advanced modes. The chain store has its field in handling goods which can be produced on a mass scale, but not where people demand goods that change almost from week to week."

Still a family business

JAMES MILLIKEN SPEERS was president of McCutcheon's for 18 years and only recently turned over the presidency to Charles McCutcheon, retaining himself the chairmanship of the board and the continued active management of the great enterprise. In the business are two sons of Mr. Speers and three nephews of James McCutcheon. It is still very much of a family affair.

There is another extremely interesting side to Mr. Speers. He believes firmly that the Golden Rule belongs in business and has done his best to practice what he preaches. He summarized his belief:

"For many years we have made an honest effort to apply Christian principles to our business and to the relationship which existed between employers and employees. It is said of Henry Drummond that when he entered a room the atmosphere of that room instantly changed. He radiated goodness. That is the way Christianity should enter busi-

Central America BANAS

ARE RIPENED ON DEMAND...in Newark!

Tropical weather in the heart of a northern winter...ripening of bananas properly controlled to meet daily demands...this is today's marketing achievement of the food distributing industry. Beneficial alike to Newark, New Jersey or Newark, Ohio.

Bananas picked green in Central America are shipped under refrigeration to warehouses here. They are put in ripening rooms containing air which is an exact duplicate of tropical air in warmth and humidity. By controlling these two factors, bananas are correctly ripened according to market demand. Thus the industry economically controls its warehouse "output," eliminates gluts, shortages and losses... maintains a steady supply "shock absorbed" to meet a fluctuating demand.

York experience and Air Conditioning Equipment were utilized in engineering and completing the installation of a large number of these ripening rooms.

Air Conditioning and Refrigeration being inseparable, York (for 50 years the refrigerating pioneer) is in a unique position to serve the refrigerating and air conditioning needs of business ... and to smooth its path to profits.

In your own business there may be production or marketing problems that only refrigeration or air conditioning...or both...can solve. York will be glad to submit an answer. York direct factory branches are in 71 U.S. cities.

YORK ICE MACHINERY CORPORATION
- YORK - PENNSYLVANIA - «



Scene in a banana ripening room in Newark, N. J., where 10,000,000 pounds of Central American Bananas are "schedule-ripened" annually. Similarly, huge quantities are ripened in other "ripening plants" located close to important population centers,

INDUSTRIAL REFRIGERATION

ICE PLANT

AIR CONDITIONING

ICE CREAM AND MILK PLANT

COMMERCIAL UNIT

MARINE

ACCESSORY AND SUPPLY

EXPORT

SERVICE AND MAINTENANCE



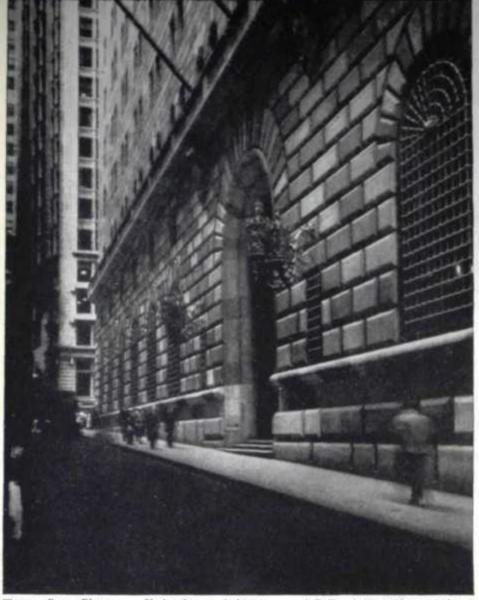
The type of air conditioning unit used in the above plant.

YORK

REFRIGERATION

When writing to York Ice Machinery Corporation please mention Nation's Business

Federal Reserve Bank . . . NEW YORK CITY



Thurman Rotan, Photo

Boston

York & Sawyer, Architects

A. B. Trowbridge, Advincy Architects

SEELI

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FIRM BELIEVERS IN 5-POINT PROTECTION

In New York and other Federal Reserve Banks and Branches the use of Steelcrete Bank Vaults is testimony of the confidence which the foremost financial institutions place in Five-Point Protection . . . Here, is proved protection (within all practical limits) against Cutting Flame, Drill, Explosives, Shock and Fire—at a cost which not only is within reach of all, but includes a larger-sized vault for the construction investment . . . Before you build or remodel, be sure to get the Steelcrete story, and Certified Endorsements.

THE CONSOLIDATED EXPANDED METAL COMPANIES

Steelcrete Building, Wheeling, West Virginia

Sales Offices and Warehouses:
Cleveland Chicago New York Philadelphia Pittsburgh Buffalo



ness. There is no need for preaching. Acting and living are what count most. It has been our practice to distribute part of our profits among our employees when conditions warranted.

That is one application of the Golden Rule but not the only one. There are other applications which have to do with the simple, daily contact of employer and employee-with the spirit of service and the morale of the organization. We don't talk much about religion in our store but we do try to live it. Hebrews, Catholics, and Protestants work together in McCutcheon's in perfect amity. When a man or woman applies for a job we usually ask to what church he or she belongs. This doesn't make a bit of difference to us. What we are concerned about is that our employees live up to whatever religion they profess."

Philanthropic and civic worker

MR. SPEERS has been interested all his life in religious, philanthropic and civic causes. He is vice president of the Presbyterian Board of Foreign Missions, chairman of the International Committee of the Y. M. C. A., treasurer of the Student Volunteer Movement for Foreign Missions, treasurer of the International Missionary Council, trustee of Mount Holyoke College and a member of the executive committee of the World Alliance for International Friendship Through Churches.

He has six sons and five of them served with the American forces in the World War. Two of them, William E. and Wallace C., are with him in business. Another, the Rev. T. Guthrie Speers, is minister of the Brown Memorial Presbyterian Church of Baltimore; a fourth, the Rev. Theodore C. Speers, is in charge of the First Presbyterian Church at Utica, N. Y.; a fifth, James M. Speers, Jr., is studying at New York University after spending several years as a missionary in China, and the sixth is now a missionary in India.

At 69 Mr. Speers is as vigorous mentally and physically, to all seeming, as the average well preserved man of 50. He is not only youthful-looking but he has the energy of youth. He likes golf and he likes to travel, but the thing he likes best—the fact that gives him his greatest satisfaction in life outside his family—is the fact that he is the head of a business that has remained in the same family for three-quarters of a century and has a pretty fair chance of staying in that family for another three-quarters of a century, at least.

"OPERATOR, GET ME LONDON"

..imagine this..on a train traveling 50 miles an hour!



A BUSINESS man was traveling between Toronto and Montreal on Canadian National's famous International Limited. To the train radio operator, he said, "Please get me London on the 'phone."

In fifteen minutes he was talking with his family in England, while traveling 50 miles an hour.

On only two trains in the world today—both Canadian National—is this miracle of two-way telephone service possible. Developed by Canadian National engineers, this train telephone is an instance of the progressive spirit that is bringing countless other new luxuries and conveniences to travelers over this, the largest railroad in America.

Observation cars, where the sun streams through vita-glass windows...radio at your chair...observation-lounge cars with bath, gymnasium and barber shop...oil-electric locomotives...the fastest service between Montreal and the middle

west . . . two transcontinental services without changing cars. These are a few of the achievements which have made Canadian National one of the foremost transportation systems of the world.

Come to Canada this year. For

helpful information in planning your visit get in touch with the nearest Canadian National office. Here you will find men who know Canada and who will gladly advise you regarding routes, rates and reservations.

Fifty Canadian National motion picture films will bring glimpses of the wonders of Canada to you in your club, or your church. Free—an evening's entertainment and education. Showings can be arranged through any Canadian National office.



Jasper National Park offers you breath-taking scenes ... sports at their best ... and the luxurious comfort of a Canadian National Lodge.

CANADIAN NATIONAL The Largest Railway System in America

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925 Earthd Ave.
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1528 Washington Bivd.
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426 W. Boperior St.
KANSAS CITY
705 Walnut St.

OFFICES

LOS ANGELES

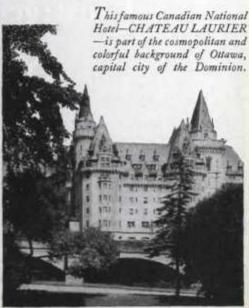
OUT SO. Grand Ave.
MINNEAPOLIS

HIS MATQUESTS AVE.
NEW YORK

STS FIRE AVE.

PITTEBURGH
SSE PITTA AVE.
FORTLAND, ME.
Grand Truck BY. SSE
PORTLAND, ORE.
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DICTOGRAPH

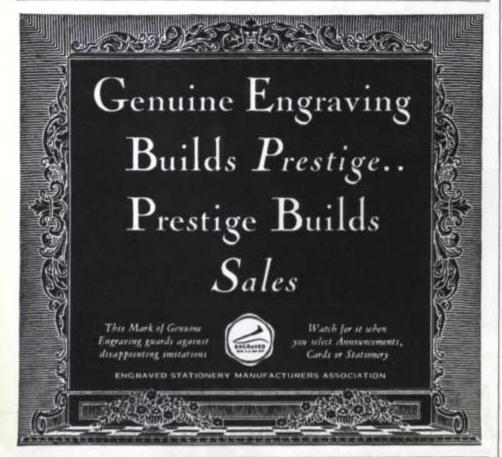
shifts your entire organization into HIGH GEAR

FROM the moment you install the Dictorraph System of Interior Telephones in your office, routine work begins to flow with greater smoothness—greater speed. A mere flick of a key places you in immediate voice-to-voice contact with any member of your staff—or with several at once. Reports are made, questions asked and answered, decisions relayed—without a man leaving his desk . . . A microphone and loud speaker embodied in the instrument flash the day's affairs from office to office with the ease and speed of radio . . . It will take only a few moments to show you Dictograph in actual operation on your desk—at no obligation to you . . . Consult your 'phone directory for our address in your city. Or write direct to Dictograph Products Co., Inc., 224 W. 42nd St., New York.

DICTOGRAPH

SYSTEM OF

INTERIOR TELEPHONES



REPRINTS of NATION'S BUSINESS articles will be furnished at cost in quantities of 100 or more.

Car Lines Face a Changing World

(Continued from page 47) referendum, which had been widely discussed for months, found 325,000 voters in the city supporting a new ordinance and only 57,000 against it. In all but one of the city's 50 wards the ordinance was approved.

Under its terms, the surface and rapid transit lines will be united in the Chicago Local Transportation Company, which is pledged to spend at least 200 million dollars on extensions and betterments in the next ten years. Of this, 65 million dollars is to be spent in the first three years.

The city is to construct a subway system—Chicago has been talking subways for more than 20 years. The subway, to cost not less than 100 million dollars, will be equipped and operated by the Local Transportation Company. About 1,700 new cars for surface and elevated lines are to be purchased and various feeder bus lines established.

Generally the plan provides for the surface car and bus lines feeding the elevated and subway systems for long distance and rapid transportation. There will be universal transfers. By using the underground system in the central business area, by adding express tracks to the elevated and extending its lines and by increasing surface car and bus line mileage, Chicago expects to change the riding habits of more than one million persons.

Real estate values increased

ENGINEERS who have examined the plan estimate that riders from outlying sections who transfer from the surface to the elevated or subway systems, will save an average of 20 to 25 minutes. The estimated increase in value to real estate is put at nearly a billion dollars.

The ordinance puts fare rates in the hands of a local Transit Commission but it requires the maintenance of first-class operating conditions and sets forth that seven per cent of the gross receipts of the new company shall be laid aside for renewals, depreciation and obsclescence. The company is required also to pay three per cent of gross receipts for the use of public property, the sums realized to pay Commission salaries and be spent in other ways designed to further the plan.

That is how two cities have gone at this matter of obtaining agreements under which they hope to enjoy a measure

This NEW WAY to type multi-copy forms

cuts record-writing costs 25 to 50 per cent







Rediform Interleaved Speed Stationery

Never, before the introduction of Rediform Interleaved Speed Stationery, was it possible to write multi-copy forms with these three operations:

1—Type; 2—Remove forms from machine; 3—Slip out carbons with one pull . . . then type the next set.

Always, with loose forms and loose carbons, the operator must spend nearly half her time getting ready to type. She must pick up forms, insert carbon sheets, jog, place in machine, and adjust for typing . . . preparatory, unproductive labor that reduces her daily output, interrupts her attention, and increases likelihood of errors.

Rediform Interleaved transforms this intermittent typing into continuous



Speedigraph Books (another Rediform product) eliminate lost motion from handwritten records in factories, offices, warehouses, and stores.

typing. Forms are in continuous lengths. Carbon paper is interleaved. As soon as one set of invoices, purchase orders (or any multi-copy form for which you wish to use it) is typed, the next set is in place. Users of Rediform Interleaved report saving as much as 50 per cent in time and clerical costs.

Let a Rediform representative demonstrate what Rediform Interleaved can do for record-writing costs in your office.

AMERICAN SALES BOOK COMPANY, Limited EXECUTIVE OFFICES: ELMIRA, N. Y. Factories: Elmira, N. Y., Niagara Falls, N. Y. Sales and service offices in 60 principal cities

Rediform

SPEED STATIONERY
AND SPEED, FORMS

Mail this slip to American Sales Book Co., Ltd., with your business card or letterhead and sample of typewritten or hand-written forms you are now using. We will give you information on using Rediform Speed Stationery or Speedigraph Books to cut record costs in your business.

N. B. 5-31

THE INIMITABLE TONE

AND TEXTURE OF

FAULTLESSLY TAILORED

TO INDIVIDUAL OFFICE

NEEDS



To the incognizant, it is an individually and permanently constructed office of costly paneling. To the owner, an office built of Circle A Partitions is equally as practical as it is beautiful-for almost overnight, it can be re-arranged to answer the constantly changing needs of business.

The owner knows how moderately Circle A Partitions are priced. And those who have owned them for a number of years, know that their beauty cannot chip or peel off-that, on the contrary, it increases with time and polish. Circle A Partitions are built of honest wood throughout-genuine American Walnut and Mahogany--they are "warm" and quiet to the touch.

Ask for photographs and description of Cabinet Imperial design—a new office wall of singular beauty and efficiency. Circle A Products Corporation, 658 S. 25th Street, Newcastle, Indiana; New York Office: 475 Fifth Avenue. Also manufacturers of Circle A Folding Partitions, Rolling Partitions, and School Wardrobes.

CIRCLE A * PARTITIONS

of prosperity and be in a position to give the best possible service at a reasonable cost. There are others, quite a number of them, and the example they have set no doubt will be followed in still other cities as the folly of the ancient theory that the way to handle a street railway company was to hamstring it at every turn becomes apparent to all.

To get away from franchises and unfair tax burdens it should be made clear that scores of street railways for several years have been and are today making real, well-organized, well-thought-out efforts to merchandize transportation. They are not taking a beating from the automobile lying down. They are trying to sell more rides by introducing new cars of lighter and better design, with speedier acceleration and deceleration, with leather seats, better lighting and other attractive features.

Selling more car rides

SOME companies are selling tokens through conductors and motormen and other employees in house-to-house canvasses or through agencies in hotels or stores with special appeals for gifts of tickets at Christmas. Others are using weekly or monthly passes at reduced rates. They are advertising special tours; offering special de luxe services, teaching their trainmen, bus operators and other workers to be courteous and neat, combating "pick-ups" by autoists. They have done a remarkable job in cutting expenses without sacrificing service.

Several cities are trying out the trackless trolley in suburban territories. Latest figures show nearly 47,000 one-man cars in use by 471 companies, more than 71 per cent of the estimated total of 62,500 active surface passenger cars.

Recently there has been some discussion of materially reduced fare rates for short rides. Cleveland has been experimenting with such a short-haul fare on part of Euclid Avenue, her principal street. The rate was first fixed at two cents but this rate, while producing many more rides than had been sold in that territory previously, produced much less revenue. With city approval it was increased to three cents and later to five cents and the route lengthened. It may be that zone fares, charging for the distance a passenger rides, will help solve the problem of some cities. In others, zone fares will be strongly opposed so that it is doubtful if they will ever contribute to a general solution.

In most communities today the prime need of the street railway is to have a public which thoroughly understands the importance of public transportation.



WHAT FOUNTAIN IS STERILIZED?

You're right! None . . . yet, it is used and used without discrimination. This is a common condition . . . but not where Rundle-Spence fountains are installed, because R-S bubblers are outstandingly sanitary. This is the only make of fountain with Vertico-Slant discharge . . . the only fountain with a jet that line cannot touch fountain with a jet that lips cannot touch. That is why Rundle-Spence Bubblers are so universally accepted.

The complete line of R-S fountains, bath and plumbing fixtures and supplies is described in our new catalog. Write for it.

RUNDLE-SPENCE MFG. CO.







NOTE TO: Presidents, Sales Mars., Credit Mars., Predoction NoTE TO: Mars., Advertising Mars., Research Mars., and

NEW CHART SYSTEM HELPS CONCERNS

PLAN IN 1931

Charting institute, 1800 Tribune Tower, Chicago Mi

Reprints

of NATION'S BUSINESS articles will be furnished at cost in quantities of 100 or more.

Replacing Blighted Chestnut Trees



Beattie examines seedlings from chestnuts he collected in Japan

AMERICAN chestnut trees, almost destroyed during the last ten years by chestnut blight, are being replaced by blight-resistant trees grown from nuts and scions gathered in Korea, Japan, and Formosa.

More than 200,000 seedlings have been grown at the forest nursery of the Department of Agriculture at Glendale, Md., from 250 bushels of nuts and scions collected from about 90 native oriental varieties. The collection was made by R. Kent Beattie, Department plant explorer, who spent two and one-half years on the job. Of the 200,000 seedlings, 73,000 were distributed last spring to foresters and state experiment stations in 17 states, from Massachusetts on the north to Louisiana on the south and west

Foresters hope that blight-resistant chestnut trees will eventually be established throughout the country, for the tree is valuable from the standpoint of nuts, lumber and vegetable tannin. Fifty per cent of the total tannin produced, in fact, is contributed by American trees.—JOHN L. COONTZ



Overland Limited"

Chicago - San Francisco

Swift! The fastest train by hours, on any route, to San Francisco and the California it centers.

Luxurious! Every refinement of travel comfort. Rooms en suite, club car, barber, valet, shower, ladies' lounge with maid and shower.

Over the ruts the covered wagons left is laid the steel of the Overland Route. "Overland Limited" "goes to sea by rail" across the Great Salt Lake, climbs high over the Sierra, close to glorious Lake Tahoe. Then down it goes through the American River Canyon, through the Gold Country of '49 to the Bay of San Francisco.

"Golden State Limited", "Sunset Limited", "Overland Limited", the "Cascade"—leaders all, of Southern Pacific's Four Great Routes. Go one way, return another and see the whole Pacific Coast.

OVERLAND LIMITED

Southern Pacific

FOUR GREAT ROUTES FOR TRANSCONTINENTAL TRAVEL

Write to H. H. Grav, 532 Fifth Avenue, New York City, or O. P. BARTLETT, 310 South Michigan Boulevard, Chicago, for book with Illustrations and animated maps, "How Best to See the Pacific Count".

Great Scot! ... a

CONSISTENCY TESTER

for GOLF BALLS!

Here's great news for the 19th hole, gentlemen. And it's going to affect every stroke, every hole, every round you play from now on.

 Remember that time you played for a hook . . . and sliced into a trap? The Consistency Tester would have labelled that ball an "erratic." Remember when you stroked what you thought was a perfect putt on the 17th . . . and it lagged a foot short? That ball was probably a "sulker." And that drive that sounded (and felt) like two-fifty . . . but died at one-ninety? Another "sulker."

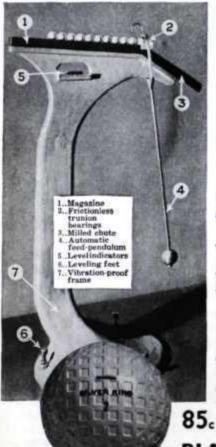
Then where is the one "untemperamental" ball that goes where it's sent ... every time? The Consistency Tester says that ball is the new and improved Silver King.

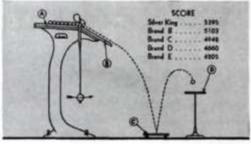
It proves the new Silver King the most consistent, in point of accuracy plus distance. Silver King actually registered 292 more "hits" than its nearest rival ... and this nearest rival got accuracy only at the expense of distance.

This, gentlemen, is because of Silver King's uniform high compression . . . always the same, wherever you buy or play Silver King. (Uniformity=consistency; high compression = distance.)

Play Silver King and eliminate one of the variables in your score. For you can always count on the consistency of Silver King . . . the one invariable in your game.

GET THE NEW SILVER KING FROM YOUR PRO OR AT ANY GOOD STORE. DISTRIBUTED IN U. S. SOLELY BY JOHN WANAMAKER





THIS IS THE GOLF BALL CONSISTENCY TESTER

Tests balls for uniformity of compression, consistency of behavior, and for distance.

Balls are released from magazine at A; roll down track at B; strike on steel bounceplate at C; automatically record their alighting places at D. Each "target" thus made is composed of 100 "shots." A 6-inch scoring circle registers greatest average number of "hits."

5 dozen new Silver Kings were tested against 5 new dozen of each of the 4 next most popular brands selling from 75e up. All balls taken from retail stock. All tests made by an accredited Testing Laboratory (name on request). Official scores, on basis of 6000 "shots" for each brand, shown above. Ask your pro for copy of a booklet giving complete details, or write to John Wanamaker, Wholesale Golf Department, New York City.

85c EACH PLAY

SILVER KING

... it's more Consistent!

The Printers' Case Against Uncle Sam

OVERNMENT competition with private business" is a phrase frequently heard, but it remains only a phrase to many American business men. They regard governmental incursions into the field of private enterprise with almost complete detachment-unless and until their own business faces such competition.

I confess that I am one of those whose toes are being trodden upon, that my interest in the subject is neither vicarious nor casual. Yet just how the Government is unfairly competing with the printing plant which I manage in the little town of London, Ohio, may puzzle some. None of the puzzled gentlemen will be commercial printing shop owners, however. We have been conversant with this particular form of government competition for too long.

Briefly, it lies in the Government'sor more specifically, the Post Office Department's-practice of printing return addresses of individuals and business houses on envelopes, and this at a price which most of us can't hope to meet.

Expensive to the printers

A SMALL item, you say. Yet it is one which costs my industry hundreds of thousands of dollars every year in lost business, an item which, like all kindred invasions of private business, sets the resources and powers conferred upon the Government by its citizens actively at work to deprive them of a part or all of their livelihoods.

A printer in a California town of 5,000 tells of how this particular practice worked out there. The local postmaster, seeking to have his post office raised to a higher grade and hence himself to a higher salary, visited all the town's merchants and sold them a year's supply of stamped envelopes, with their addresses printed in the corner. The Government lost money by paying the postmaster's increased salary and the local printer lost the business.

This recital will either leave my readers cold or send them hurrying to their post office to get some of these "lowpriced" printed envelopes. But wait until the particular commodity or service from which they gain a livelihood is offered by the Government "at cost." Then listen to 'em yell.

-R. B. HOWARD, The Madison Press Company

NEW WILLYS SIX TRUCKS

The new 157-inch wheelbase 1½-ton chassis designed to handle extra long or bulky loads, priced at \$35 additional over the standard 1½-ton Model C 131



WILLYS SIX LONG WHEELBASE 11/2-TON CHASSIS MODEL C 157 Heavier frame, sturdier bridge type cross members. Available with oversize single tires and dual wheel options at nominal additional cost.

Modern, Dependable

1/2-ton chassis (113" wheelbase)

*395

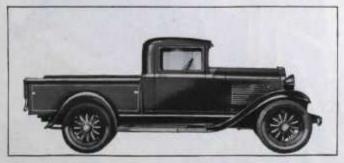
1½-ton chassis (131" wheelbase)

*595

f. o. b. Toledo, Ohio

Willys Six trucks of one-half to one and a half ton capacities now available in three wheelbases of 113, 131 and 157 inches.

Superior truck value, 65 horsepower six cylinder engine, full force feed lubrication, floating type oil suction, four wheel fully enclosed Duo Servo brakes—cable type. The 1½ ton units have four speed transmission, full floating rear axles. Optional wheel and tire combinations, both single and dual, are available at small additional cost.



CLOSED CAB PICKUP

Speedy transportation. Smart, distinctive deluxe cab with unusual room and comfort. Large, all-metal pickup box-inside width 47% inches. Length 66 inches.

COMPLETE WITH BODIES FOR EVERY BUSINESS NEED

A FINANCING SERVICE that keeps step with industry

THE financing facilities of the C. I. T. Companies are being extended to an ever-widening range of products. Especially are we organized to cooperate with the machinery trades...so that through the stimulus of instalment terms the many new and improved types of equipment may find a ready market among those who can profitably use them, but who would be reluctant to buy for outright cash.

C. I. T. Service takes care of every detail of a credit transaction—from the initial check-up on a prospective buyer through to the collection of his final instalment. Keeping abreast of industry's demand for quick action, this complete financing service is offered through the C. I. T. network of local offices which operate at close range in every important market.

Does your company make or sell a standard line of machinery or equipment? Our representative is at your call, without obligation, for a discussion of any phase of sound instalment selling. Send for him today.

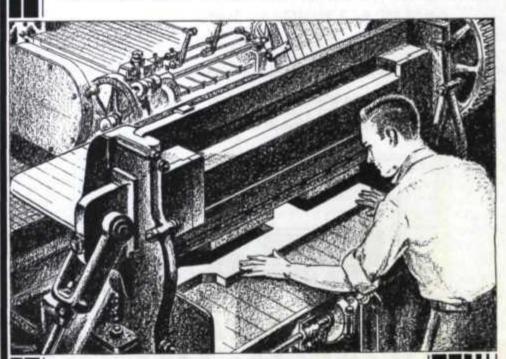
OMMERCIAL INVESTMENT RUST CORPORATION

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Subsidiary and Affiliated Operating Companies with Head Offices in NewYork - Chicago - San Francisco - Toronto - London - Berlin - Brussels - Paris - Copenhagen - Havana - San Juan, P.R. Mexico City - Buenos Aires - Sao Paulo - Sydney, Australia - Offices in more than 160 cities

CAPITAL AND SURPLUS OVER \$90,000,000



BANKERS TO INDUSTRY EVERYWHERE



Some of the equipment products which C.I.T. is engaged in financing are:

MACHINERY

Agricultural, Bakery, Bottling, Canning, Compressors, Conveyors, Dairy, Diesel Engines, Dyeing, Embossing, Laundry, Lithographing, Paper Making, Pattern Making, Pressing, Printing, Pumps, SawMill, Steel Punching, Textile, Turbines, Vulcanizers, Washing, Welding, Wood-working, X-ray.

EQUIPMENT FOR

Contractors, Garages, Hotels, Restaurants, Theatres, Aircraft, Electric Light Plants, Refrigeration Plants, Ships and Barges

What Wall Street Is Talking About

By MERRYLE STANLEY RUKEYSER

*A JOURNALIST of long experience and varied contacts, Mr. Rukeyser brings to his readers observations and interpretations such as few financial writers can offer. His friends include the great of the world of finance. His writings, naturally, reflect these intimate contacts

USINESS has undergone an important change in mental attitude. It has turned its attention from "can" to "how," and the shift in sentiment is no small factor in preparing the ground for the next phase of prosperity.

Since the middle of December, business in the aggregate has ceased declining. The improvement has been largely negative in character. As business has moved sidewise near the bottom, it has perhaps been accumulating impulses toward more positive recovery.

As business enters the midyear period, the impatient will doubtless be disappointed with tangible progress, and perhaps the excessively bullish will be punished during sharp intermediate stock-market declines. But business executives are becoming increasingly confident that economic recuperation is feasible, and the belief is growing that it is slowly under way. There appears no reason to revise the earlier forecast that the actual gains will be more discernible in the second half of the year than the first, and that the public will have to wait until 1932 for normal business.

ONE important advance from the depression has been the marked progress in elimination of economic waste in company operations, and in the scrapping of obsolete and inefficient machinery. The farseeing have adjusted their operations to a lower price level, and have prepared their organizations for expansion in the next period of economic renaissance, which they believe lies ahead.

In all probability, the large and

dominant corporations will have heightened their preponderance of power as a result of the readjustment.

AN intellectual result of the depression has been the increased demand for industrial planning and economic coordi-



The newest skyscraper of the New York financial district is the City Bank Farmers Trust Building

nation. There is a growing impulse toward rationalization and a recognition of the limitations on competition. In discussing this need for economic planning, Wallace Brett Donham, dean of the Graduate School of Business Administration, Harvard University, said:

"The danger in our situation lies not in radical propaganda, but in lack of effective business leadership."

In his new book, "Business Adrift," the Harvard dean, who is himself director in five companies, reported:

"American business seems to be groping for such a plan. The research institutes and similar organizations in

particular industries which are springing up are evidence of this, and the activities of the United States Chamber of Commerce are in this direction. Too large a percentage of the thinking is being done wholly in relation to particular interests and their needs, and I see nowhere signs of a general philosophical attack on problems of the relationship of American business to civilization, followed by general plans consistent with the relationships so discovered. Yet failure to bring this about may jeopardize our whole economic and social structure.

". . . Preserve individual initiative, yes! But shall we admit that individual initiative cannot be coordinated into intelligent planning? If so, we shall be fortunate if we retain individual initiative in the face of such shocking waste of community resources, for it may turn out that from a material point of view socialism makes possible higher standards of living than capitalism. I should be willing to pay even this price for personal liberty and individual initiative, but do not think it necessary. I believe we can secure competent general business planning without losing liberty and personal initiative."

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make the business man conscious of the public aspects of his problems. Incidentally, Mr. Thorpe has served an especially useful purpose in setting new standards for making business talks interesting. At ordinary conventions, business men frequently fall down as public speakers. Forgetting that they are merchants seeking a market for their verbal wares, they often become more academic than the academicians, and repeat old dogmas while ignoring new truths. They lose sight of the humaninterest appeal of anecdotes and specific incidents.

As an occasional speaker at business conventions, I sometimes get the idea that business audiences are partly to blame. Occasionally an excess of rotarian hilarity, artificially stimulated by bootlegged exhilaration, discourages serious presentation of subjects important to thoughtful and responsible executives. The chief demand is often for entertainment, rather than enlightenment. And yet, the knotty problems of a troubled economic world can hardly be solved by vaudevillians.

THOMAS H. McINNERNEY, president of the National Dairy Products Corporation, has carried the modern notion of good public relationships a step further. After receiving proxies in behalf of the management from shareholders of the company, Mr. McInnerney sends out individual letters, thanking each stockholder for his courtesy and also expressing appreciation for the stockholder's expression of continued confidence in the management,

There is perhaps an idea in this for other executives, especially nowadays when the tenure of management in office depends to an increasing extent on the capacity to bring out a majority of supporting proxies.

In the American Telephone and Telegraph Company, for example, no stockholder has as much as one per cent of the total amount of stock outstanding. and the management must depend on proxies from the public stockholders. This is not the case in closely held corporations, which are dominated by one or more outstanding capitalists.

SINCE the panic, investment trusts have been so hard pressed to keep their heads above water that they have made almost no progress toward the attainment of their larger possibilities. The first chapter-the promotion of investment trusts-has just come to a close. The next phase should be concerned

with the improvement of investment management, so that these organizations can at length fulfill the promises which they made to a now discouraged and disillusioned investment public.

After accomplishing this, investment trusts can begin to consider services to the investment public.

It has long been notorious that annual meetings of great American corporations are poorly attended. The apathy of the average stockholder is appalling. He wants only dividends and stock appreciation, and is rather bored with other problems. Only depression brings revolt and a sense of challenge.

In Great Britain, on the other hand, company meetings are less matters of routine, and frequently bring forth information of great value to seriousminded investors.

As a check on management, it would be extremely desirable to develop a more enlightened group of investors.

The small individual investor cannot afford the railroad fare or the time to journey to annual meetings in distant places.

But the investment trusts, representing cooperative activities in behalf of thousands of individuals, are large enough to develop into scientific and intelligent investors. There should perhaps be an association of investment trusts which could take leadership in emphasizing the outside stockholders' viewpoint in regard to corporation management. Such an association should send representatives, with proxies, to annual meetings of all important corporations in which investment trusts are interested as stockholders and through intelligent questioning should bring out hidden information and interpretation of financial results, which would facilitate intelligent and informed invest-Ultimately, the associated investment trusts might go further and elect minority representatives to boards of directors. The purpose should not be obstructive, but rather to appoint watchdogs who would make sure that the interests of outside stockholders are fully safeguarded.

THE absence of such independent audits and checks on management brings friction in times of depression, when discontent naturally rises. Customary stockholder inertia, which has been a limiting factor in the progress of American corporations, has been supplanted temporarily by spirited stockholder revolts in Bethlehem Steel, Container Corporation, Continental Shares, American Tobacco, Lorillard, Calumet



Lower Broadway, New York-Guaranty Trust Company Buildings at left.

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& Arizona, Transamerica, Philadelphia Rapid Transit, Brill Corporation, and New York Dock.

IN Bethlehem Steel and American Tobacco, the issue is whether the distributions to officers in the form of bonuses have been excessive. There has been much heat over this controversy, and not a few responsible financiers, speaking privately, have expressed sympathy with the critics of management.

Although the amount of proper compensation, direct and indirect, is a matter of opinion, disinterested outsiders think that the insiders owe it to stockholders to make full and frank detailed annual reports on bonus distributions.

In the case of Bethlehem, the criticism has been made that Charles M. Schwab, in the distribution of the bonus, exercised dictatorial power. There also has been criticism of the policy of paying handsome bonuses in years when the stockholders, who took the business risks, received no dividends.

As for myself, I think it is good business for companies to give large incentives to responsible managers, on whose capacity success or failure hinges. Bonus plans, however, should be revealed fully in each annual report, and an alert outside stockholder interest should demand frequent proof that a system intended to strengthen the corporation is not gradually converted into a scheme for exploiting it.

One significance of the question is that nowadays the capitalization of great companies is so large that it is difficult for individuals to acquire a dominating interest in the ordinary way. The newer effort is to make superior managers rich through rewards paid directly for managerial results.

RECENT interchanges of opinion between representatives of the New York Stock Exchange and certified public accountants have sought to establish better corporate accounting standards. The principal objective has been to get, through voluntary action, uniformity in industrial accounting. In the case of the railroads and operating public-utility corporations, uniform accounting has been forced by law. Unless industrial corporations respond to this healthy suggestion by the Stock Exchange for more revealing and more uniform accounts, it is likely that they will be forced by law to change their accounting prac-

The wide variations in accounting policies make it difficult, if not impossi-



Many an industry could not have introduced its products so quickly and attained its present size as rapidly without installment buying. Installment paying of past due bills (without keeping creditors waiting) offers an even more essential means of hastening business recovery. How the average family may consolidate its debts, repay creditors at once, and repay the family finance

company in small installments is the subject of this advertisement. It is one of a large series that is now appearing in newspapers of four and threequarter million circulation. Public spirited citizens are invited to write for more information about personal finance as an essential for insuring prosperity. Address Dept. N3, Household Finance Corporation, Palmolive Bldg., Chicago. Uncontrolled light and air cause irritation and inefficiency



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"Kane Quality" Venetian Blinds solve the problem of light and air, and the question of office appearance, at one full swoop. True, they cost more than window shades but they do more. The light they let through is diffused and mellow, admitted to the room at any desired angle, and in any desired quantity. The efficiency curve of office workers goes visibly up, under the encouragement of controlled light and air. More work, less mistakes justify "Kane Quality" Venetian Blinds as an investment of high yield, besides indicating an executive solicitude that is beyond price.

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ble, for the lay investor scientifically to analyze and compare the behavior of industrial corporations, as disclosed in the balance sheets and income accounts.

Among the specific questions which the accountants and the Stock Exchange are discussing are uniformity of practices in regard to depreciation; the introduction of consolidated financial statements for closely affiliated corporations (there is need of agreement as to the degree of ownership of a subsidiary which warrants a consolidated statement); the demand for publication of net sales, gross volume of sales, and gross income; the desirability of distinguishing between operating income and other income; the desirability of segregating "earned surplus" on the balance sheet, and uniform practices in regard to accounting for stock dividends paid or re-

The Stock Exchange, through J. M. B. Hoxsey, executive assistant of the committee on stock list, deserves commendation for its courage in attacking the bunco game of hiding earnings and assets under the respectable guise of overconservatism in accounting.

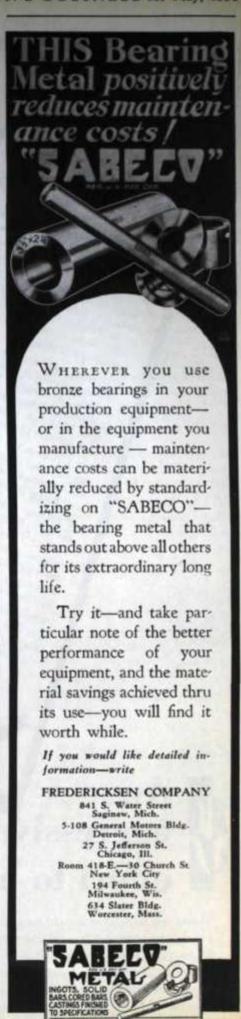
In taking up the cudgels for better accounting for small investors, the Stock Exchange is identifying itself with the public interest. By such good works, the Exchange will make more friends than could ever be won through propaganda.

IT HAS been my privilege to keep in close touch with the White House attitude toward business stabilization. After the shocks of prolonged depression, President Hoover is still firmly convinced of the need of economic coordination, especially by voluntary organization within the various industries.

The President is pleased with the part the administration played in encouraging the cotton-textile industry to rationalize its operations. Of late, the chief business sore spot with which official Washington has concerned itself has been the oil industry.

President Hoover thinks that the time is past for dramatic gestures, such as were made at the White House Conferences in November 1929, and believes that the Government can help most by cooperating quietly with business executives in meeting individual situations as they crop up.

Though reluctant to essay anew the rôle of prophet, the Chief Executive is greatly impressed with the improvement in business sentiment and with the cessation of the major decline in operations.



Are Our Antitrust Laws Out of Date?

(Continued from page 34) ducing commodities both for domestic consumption and for foreign markets.

Some of the practical objections which I have indicated were referred to by President Hoover in his annual message to Congress, December 2, 1930. He said:

I recommend that Congress inquire into some aspects of the economic working of these laws. I do not favor repeal of the Sherman Act. The prevention of monopolies is of most vital importance. Competition is not only the basis of protection to the consumer but is the incentive to progress. However, the interpretation of these laws, by the courts, the changes in business, especially in the economic effects upon those enterprises closely related to the use of the natural resources of the country, make such an inquiry advisable. . . . The people have a vital interest in the conservation of their natural resources; in the prevention of wasteful practices; in conditions of destructive competition which may impoverish the producer and the wage earner. They have an equal interest in maintaining adequate competition. I, therefore, suggest that an inquiry be directed especially to the effect of the workings of the antitrust laws in these particular fields to determine if these evils can be remedied without sacri-fice of the fundamental purpose of these

In this time of world-wide depression and of ever-increasing competition with other nations, I submit whether the time is not approaching when we shall have to depart from, or at least modify, our economic policy of conserving only the immediate interest of the ultimate consumer and whether we shall not have to adopt at least a modification of the "national economy" scheme pursued by our European neighbors.

If we adhere strictly to the theory that competition must continue regardless of the fate of the producer, it may become so keen as to deprive him of any return on capital invested and deny a living wage to his employee. Under the existing system, the larger units, by the law of decreasing costs, are slowly replacing the smaller producers. A saner solution might be evolved by agreements which tended to equalize production and consumption to the general advantage.

I am not advocating further intervention of Government into business. There is entirely too much of that already. On the contrary, I would give the fullest freedom to individual action within limits defined by a governmental agency. Panaceas are generally unsatisfactory, but it occurs to me that indus-

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BUT the bitter, costly mistakes are those that aren't caught . . . those that slip by.

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* To our classified advertising room," says C.A. Collins of the Pittsburgh Press, "18 or 20 girls are constantly talking with clients over the telephone. Experience has proved that distracting noises in these rooms increased nerve tension; lessened concentration, and lowered efficiency, thereby resulting in costly errors. Equipping these offices with Acousti-Celotex has paid for itself many times over in the increased efficiency of workers." Acousti-Celotex is an attractive fibre tile that is quickly installed in old or new buildings. No remodeling is necessary. No interruption to office hours.

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try will be assisted and stabilized if contracts and regulations, having for their purpose the proper control of production, are permitted.

Much could be accomplished by amending the Sherman Act to sanction agreements among manufacturers when, in the opinion of some governmental agency, the public interest would be promoted. If persons desiring to enter into such contracts could obtain advisory opinions on the legality of their proposed action, and be immune from criminal prosecution and responsibility for treble damages, the disastrous consequences would be removed. The retention of the right to dissolve a combination when it had outlived its usefulness would, at the same time, insure against the old evils of vicious restraints.

Bar Association asks change

THE subject of our antitrust laws has received the serious consideration of the American Bar Association for several years. Its commerce committee, after careful investigation, has recommended that the acts be amended:

 By vesting in an administrative agency, preferably the Federal Trade Commission, the power to approve in advance trade contracts voluntarily submitted, and

tracts voluntarily submitted, and
2. By granting immunity to the parties
thereto for acts done in pursuance thereof
during the existence of such approval.

The report of the committee has been approved by the Association, now numbering more than 29,000 members.

It is futile to expect a repeal of the Sherman Law. Such action, I believe to be not only politically impossible but unwise from the standpoint of business and industry. If it were repealed we might get a law much more onerous.

But the law is not flexible enough to meet the ever-increasing complexities of our social life. Mergers and combinations and protective trade agreements are inevitable in the interest of economy in production and distribution.

Therefore, I submit that the law should be amended so that, without taking away any of its safeguards against monopolies or unreasonable restraints of trade, it may be adaptable to modern conditions; that we should create or enlarge the powers of some administrative governmental agency, probably the Federal Trade Commission because its machinery is easiest of adaptation to the purpose, and permit business and industry to obtain advice as to whether proposed agreements are consistent with the law, as it may be construed from time to time, consonant with existing circumstances.

The "Why" of Private Brands

By WILLOUGHBY M. McCORMICK

President, McCormick & Co., Inc., Baltimore

T IS ESSENTIAL to determine the cause of the present movement of so-called private branding in the manufacture of spices, teas, extracts and other highly specialized products before a remedy can be found. Certainly a remedy is imperative because the loss due to the forcing of private brands into the channels of the country's distribution is large. Although it is impossible to estimate this loss accurately, we know that it burdens the activities of many manufacturers, wholesalers, retailers, financial institutions and the public.

During the last two years, this movement has assumed something of the nature of a prairie fire and it is still breaking out in unexpected places.

Move goes on apace

A POWERFUL distributing organization has reported that its operations are keeping more than 80 factories running day and night producing a wide variety of goods under its own labels. One of the largest voluntary chains in the grocery field has announced a change of policy that will annually

place several hundred million dollars' worth of the specialties it distributes under its own trade-marks. Department stores, chain organizations, wholesale grocers and other distributors have adopted their own privately labeled goods. In every instance these new products are displacing established and nationally advertised brands.

Consequently, manufacturers of advertised products are finding their markets seriously impaired and their selling costs increased.

In determining the cause of this movement, I am sure the manufacturers need look no further than their own selling practices and distribution methods. Nevertheless, numerous theories have been advanced. One of the most interesting is that some manufacturers of standard products have failed to reduce their prices with falling markets.

This theory was ably presented in L. D. H. Weld's article, "When Brands Face Falling Prices," in NATION'S BUSINESS for January. Mr. Weld mentioned the rather sharp decline of commodity prices several months ago, and said that most advertised brands resisted the decline of the general price level.

"Many chain-grocery stores and mailorder houses, on the other hand," he added, "have reduced the prices of certain heavily used staple commodities, so



UNECONOMIC business practices are destroying the established value of many nationally advertised brands. Distributors are adopting private brands—an expensive undertaking, and not the answer, according to Mr. McCormick, though it looks economical at first sight. Whether you are a retailer, a wholesaler, a manufacturer or a consumer, you should find this discussion of interest

that they have kept in fairly close step with the decline of raw material prices. They have made capital out of this procedure."

There is truth in these statements. However, we have experienced many conditions parallel to the price changes discussed, and never before have declining commodity prices caused or appreciably encouraged the general adoption of private brands. Therefore, although falling commodity prices may have helped to promote the movement a more basic cause is indicated.

Mr. Weld admits that other influences are encouraging the handling of private brands; but he has not discussed these influences at length. He sticks closely to the premise that the reason for the present private-brand movement is price. His article also states that the development of chain stores has complicated the problem, especially in the grocery field. Here I am sure he has approached a more important contributory cause.

For more than 40 years, my company has been studying the private-label problem, in the manufacture and distribution of spices, flavoring extracts, condiments and other grocery specialties. For 15 years we sold practically all our volume under the brands of our distributor customers. Then we changed our policy. For 25 years we have promoted only our own brands. We made this change after an exhaustive investigation which proved conclusively that the specialties we manufacture can be distributed more economically through proper merchandising under our own advertised brands.

As this article is written the markets of nearly all grocery commodities have been fairly stable for several months. The prices of practically all nationally advertised grocery products have settled down to their customary relationship with commodity prices. Yet there has been no indication of a general diminution of the private brand movement.

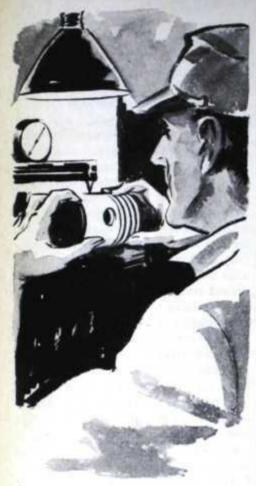
While the largest chain-store organization in the world has announced that it will diminish its number of privately labeled goods, the largest voluntary chain has adopted a policy of extensive private branding. In stating their reasons neither of these organizations supports Mr. Weld's contention.

Wholesalers change policies

IN OUR own business, we find that a number of wholesale grocers have recently abandoned the private-label policy while others have adopted it, and that neither class gives the spread between the cost of raw materials and the price of finished products as a reason.

Although nationally advertised grocery products tend to lag behind falling commodity prices, they show a greater tendency of this kind when prices are advancing. A few years ago, for example, the tea market advanced rapidly, and at the end of one year we found we had lost many thousand dollars on our

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tea business. The next year, we lost about a quarter the amount before the tide turned. We could easily have saved a large part of this loss by substituting a tea which cost ten to 15 cents less a pound and which was so similar in appearance that the average person would not notice it. However, having spent several hundred thousand dollars advertising the high quality of our tea, we did not dare to lower this quality.

When the tea market began to decline, we again lagged behind market prices. We desired to make up as much of our loss as competition would allow. Unfortunately, however, I do not know of a single manufacturer who has been able to recoup his losses in this way.

Another reason for prices lagging behind a declining market is the large manufacturer's inability to adjust his distribution to rapid changes in cost. In our factory, for example, we carry at all times more than one million dollars' worth of raw materials and of goods in process of manufacture together with our finished products. Our selling prices, of course, are largely based on the cost of these materials. We have found it impracticable, therefore, to adjust our selling prices more frequently than every 60 days. This lapse of time, certainly, gives little opportunity to the privatelabel promoter in our industry.

Successful in some lines

SOME products are more seriously affected than others by the movement. It should be remembered that successful private-grocery branding has been limited for many years to certain lines distributed by large operators. These products, mainly canned fruits, vegetables and other staples, are bought in large quantities by distributors, and national advertising has not been so widely developed in this field as it has with innumerable specialties. The tide of private branding has swept over hundreds of other grocery products that cannot be as economically distributed as factory brands.

Within this much more extensive class of merchandise, when the quality is the same, private brands in our field cannot be produced as economically as can goods packed under factory labels. In this large field of merchandise, which is typically represented by the lines we manufacture, the cost of producing most privately labeled products is from five to 25 per cent more than the cost of regular factory production.

Again, this class of goods unquestionably costs more to sell. The privately labeled specialties do not turn over as



Wherein a Veteran does not try to tell you how to run your business but extends a helping hand.

During your own experience you have accumulated knowledge and developed methods that could unquestionably be adapted—with profit—to industries and business other than your own.

So it goes with us. Except that it has been our business, for a generation, to serve all industries. And in the course of that experience we have unquestionably accumulated knowledge and developed methods that could be applied to the solution of your manufacturing problems—with profit.

Add to this cumulative experience a technical staff thoroughly trained in all phases of product engineering and creative development . . . a manufacturing plant with unsurpassed facilities for a wide range of work . . . a crew of skilled craftsmen who employ these facilities to the fullest advantage . . . and you can visualize the value of Taft-Peirce Service to your specific problems.

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rapidly—they have to be constantly resold to the same customer, thus causing a continual initial selling cost.

In the financing of distribution we find that private brands make a still poorer showing. When the liquidation of a wholesale or retail stock is necessary, privately labeled groceries average about 20 cents on the dollar, while standard and nationally advertised brands average about 95 cents in value. For this reason, well informed bankers invariably curtail their loans to wholesalers and retailers who adopt private brands.

With these facts understood, it is apparent that no distributor who knows his business would adopt a private-brand policy for reasons of economy, or to take advantage of a decline in commodity prices. The hundreds we have questioned all tell the same story, and their reason is based on selling, not buying. Invariably, they have assured us that, because of the demoralized condition of their distribution, they find it impossible to distribute many advertised and standard products at a profit.

The basic idea of these distributors is to place their business above the widely prevalent profitless competition.

Guarded against price cuts

UNTIL a few years ago, our manufacturers created a system of selling with advertising and merchandising that was the wonder of the world. During this development, all national advertisers feared the price-cutter and did everything possible to prevent the demoralization and waste that inevitably followed the practice of retailing advertised goods below cost to attract trade. They recognized that the success of their distribution depended on the establishment of the value of their merchandise. Advertising accelerated the movement of the manufacturers' goods; distributors and retailers bought advertised brands and featured them. They willingly accepted them in many cases on narrower margins, because the goods, with their more rapid turnover, gave them a more frequent repetition of profits. This system was sound as long as the value of the goods was sustained.

Then an unusual factor developed. This factor, the mass distributor, had many of the aspects of the price-cutter. However, he bought goods in undreamed of quantities, and he owned or controlled large numbers of retail outlets. Because of the large orders and the certain retail distribution he offered, he demanded concessions in price, and then more concessions.

Unfortunately, this development came

Your -

Efficiency Expert

... will O.K. this

'WATER-BOY'

WRITE your own specifications—what do you want in a water cooler?" This is what we tell the efficiency expert, the office manager, or the purchasing agent, because we know from experience, Kelvinator automatic Water Coolers meet all requirements.

An individual cooler for the office; a large capacity cooler for the factory; or a circulating system for a hotel or office building—regardless of the size or kind of water cooling job, Kelvinator can handle it. And handle it in such a way—so satisfactorily that your efficiency expert will okeh it enthusiastically.



On this page are illustrated the pressure and bottle types for offices, banks, clubs, institutions, etc. Both are fully automatic, quiet, dependable, beautiful.



For the bottle type you merely plug into the nearest electric light socket; for the pressure type, it is an easy matter to connect the cooler with the city water lines and you have cool, sparkling water—in abundance.

Call the Kelvinator refrigeration engineer in your city, or, send the coupon below, and we will send you complete information about these beautiful, economical electric water coolers.

KELVINATOR CORPORATION 14244 Plymouth Road, Detroit, Michigan

Kelvinator of Canada, Ltd., London, Ontario Kelvinator Limited, London, England

-		-	-	4.4
14244 Gentlen	nen: Please Electric W	poration, h Road, De send comple ater Coolers.		1931
	4.4.			
Street A	taaren			

Kelvinator



What DOES Good FENCE Cost?

Good fence costs nothing-it saves more than its price.

Good fence affords protection, improves appearances, enhances property values and more than pays for itself out of savings from the elimination of petty thieving, the reduction in expenses of watchmen and many other advantages that only good fence provides.

Good fence is an investment—only poor fence is an expense.

Continental Chain-Link Fence is correct in every detail, dependable in quality and dorable in service. We assume complete charge of its erection and guarantee lasting satisfaction. Continental Fence Engineers will gladly advise with you on your fence problems, without obligation. Write us today.

CONTINENTAL STEEL CORPORATION

KOKOMO, INDIANA

Distributors in all Principal Cities

Manufacturers of: Chain-Link, Farm, Poultry and Lawn Fence and Gates; Billets, Rods, Wire, Nails and Barbed Wire; Biack, Galvanized and Roofing Sheets

CONTINENTAL



at a time when at least 95 per cent of our manufacturers, among them most of the largest in the country, apparently believed that volume was the greatest attainment of their business. Before 1922, approximately, our most successful manufacturing enterprises were building up on a policy of producing the volume they could sell. After that year they seemed determined to sell all of the goods they could manufacture. The mass buyer fitted into the general scheme of procuring volume at any price.

In his determination to procure large volume, the average manufacturer of standard and advertised products ignored the menace of the price-cutter. He readily granted concessions of one kind or another to land mass orders. He failed to realize that the larger the pricecutter, the greater is his capacity to destroy values and demoralize distribution.

The result is the present chaotic state of distribution, including the most amazing array of uneconomic selling practices, price concessions, secret rebates, advertising allowances and other hidden methods of cutting prices, that American business has ever known.

Three or four years ago the officials of several large manufacturing companies argued that it was necessary to meet the demands of the mass distributors to prevent them from adopting their own private labels. Now, after destroying the previously established value of a great many advertised brands by using them as "loss leaders," many of these same mass distributors are throwing out the standard goods and substituting products under their own labels. They

have proved that when a manufacturer accepts practices that destroy that mental quality, value, which surrounds his goods, he makes his goods unprofitable, and hence unwelcome, to all wholesale and retail distributors.

Under these conditions, we cannot blame any distributor for striving to find a remedy. In checking up his stock he finds a rapidly increasing number of items on which it is impossible to make a profit. He formerly considered national advertising as an aid to his success; but now he frequently finds it being used to force him to handle certain advertised goods at a loss.

Private labels will cause loss

WHILE we do not blame the distributor for his attitude, we take exception to the expedient he is employing in many hundreds of cases. The private-label movement will eventually die a natural death in specialty fields because it violates economic principles. Left to run its course it will pile up many millions of preventable losses and further demoralize our general distribution.

It is obvious that a remedy is needed; but it is useless to set forth theories as to the cause of the movement by arguments from the viewpoint of academic economics. We do not have to look further than the reasons given by the private-brand promoters for their adoption of their policy to find the cause to be the breaking down of the values of advertised products by uneconomic business practices. Consequently, we can find a remedy only by correcting the conditions responsible for the cause.

Where Business Will Meet in May

DATE	GRGANIZATION CITY	
4.9	International Chamber of Commerce	C
4-11	Exposition of Chemical Industries New York	
6-9	Heating and Piping Contractors National Association Louisville, Ky.	
7	National Cheese Institute, Inc	
10-14	National Fire Protection Association	anada
12-13	Illinois Grain Dealers Association	
12-14	Southeastern Retail Hardware & Implement As-	
12-15	Master Boiler Makers Association Chicago	
12-15	National Association of Sheet Metal Contractors of the United States Chicago	
14-16	Pacific States Paper Trade Association	
15	New England Traffic Learne Boston	
15-17	New Jersey Bankers Association	
17	Western Truffic Conference Fortland	
18-20	National Sanitary Supply Association Louisville, Ky.	
18-21	American Booksellers Association Philadelphia, Pa	
19	New England Daily Newspaper Association, IncBaston	
19-20	Northwestern Retail Coal Dealers Association Minneapolis	
21-22	National Electrical Credit Association	
21-22	Rail Steel Bar Association	
21-23		
25		
25	Rocky Mountain Coal Mining Institute	
26-27	American Home Magazine Publishers, Inc	
27-29		



I do not choose to change

A BANKER remarked the other day:

"The business man who does not choose to change is a bad risk."

No matter who you are, there is a competitor just around the corner laying deep strategy to deprive you of your custom and customers—or your job.

Change and Competition today march down Main Street as one.

They put the word "amazing" into the Amazing Decade through which we have just passed. Telephone exchanges with mechanical operators; power stations with Robot attendants; elevators self-starting and self-levelling; street cars with automotive brakes; airplanes directed by radio and lugging passengers, express and mail by night and day; pipe lines burrowing across the continent; ships driven by electricity.

Broadcasting, a national institution; the photoplay; the talking pictures; television.

Chemistry has added to our vocabulary such words as Celotex, Cellophane, Celanese, Rayon, Velox, Duco and Pyrex, while science gave us mechanical refrigeration, oil heat, frozen foods, and the automatic stoker.

Change and Competition! Together they see to it that a commercial house of a century's standing may be destroyed with bewildering suddenness. But by the same token, an infant enterprise becomes national overnight.

Biologists tell us death is necessary to life. Economists might say as much. The economic battle, inexorable, yet beneficent, provides change, which is progress.

Out of the flux and ferment emerge the victors men, alert, resourceful. In America we permit them to win the reward in order that all of us may live more fully.



EVEN greater changes may be expected in the years ahead. Already in 1931 some 600 new processes in production have been announced. In one week recently 3,174 new patents were issued, four times the normal number.

To him who can read the riddles of tomorrow's production, tomorrow's transportation and communication, tomorrow's selling, success is assured. A million of us stand ready to underwrite his vision. The world still steps aside to let any man pass who can see a year ahead.

Back of all this change is someone's brain at work. In America, the lists are open to all. No matter who you are, office boy or general manager, "men wanted with ideas" still applies to you. A night watchman, sitting in his shanty, discovered thermostatic control and made your automatic electric iron and toaster possible. The times cry out for new improvements in every line, from asbestos and banking to insurance and zinc.

Look over and beyond your desk. There is opportunity. From a background of what is going on in other lines, make application to your own. Keep informed—anticipate, adapt, adopt—and keep informed.

Nation's Business is published to help supply you with that necessary background of information.

NATION'S BUSINESS

PUBLISHED MONTHLY AT WASHINGTON BY THE UNITED STATES CHAMBER OF COMMERCE MORE THAN 320,000 CIRCULATION * * * * * MERLE THORPE, Editor

PROCTER & GAMBLE EMPLOYEES WEAR

Sanitation plays an important part in the manufacturing of the many fine products of Procter & Gamble. To protect these products, employees are not permitted to work in their street clothing. They have adopted a simple, washable uniform . . . one that is easily kept clean, looks neat and is simple to launder.

WASHABLE UNIFORMS

A standardized uniform in any plant promotes harmony, personal cleanliness, organization loyalty, sanitation and eliminates petty jealousies caused by dress distinction. Uniforms are a step toward the solution of personnel problems in many industries.

The idea of using plant uniforms must have advantages, for such nationally known concerns as the Beechnut Packing Co., Kelloggs, Parke, Davis & Co., Ward Baking Co., Feischmann Co., and many others have adopted them ... and every one fithem, after much consideration, selected Angelica Uniforms.

May we send you our booklet of Washable Uniforms so that you, too, may select the style that will best suit your needs? There is no obligation and no salesman will call unless requested.

ANGELICA JACKET COMPANY

New York * + 104 W. 48th St., Dept 81 Chicago * + 1238 N. Clark St., Dept. BS St. Louis, Mo. * * * * 1481 Olive Street



To THE EDITOR

. Government Smashes

TO THE EDITOR OF NATION'S BUSINESS:

I am returning you herewith the renewal slip to NATION'S BUSINESS without any check for the reason that we have practically no business.

We find that after the best efforts of our life for 25 years or better that the Government has taken over our business and destroyed, not only our business, but also the cotton, live-stock, wool and various other large business interests scattered throughout the United States.

There is no particular evidence available to indicate that the aim of the Farm Board at any time was other than to destroy the people engaged in these various enterprises.

In the past, we, as a nation, have been amused at the dictators in various foreign nations and no country that we know anything about has ever handed over to a president, a ruler, king or queen, powers equalling those handed over to our Farm Board by our Honorable Congress and the President of the United States.

Under existing conditions, NATION'S BUSINESS is of very little use to us as we have no business of our own and we are one of many thousands who have been ruined by this process and this fact is well known to the lawmakers who so eagerly put these laws on the statute books and about all we can say is "Oh! Lord, how long can this condition exist."

C. W. LAWLESS President

Lawless Grain Company Kansas City, Mo.

· Terms Corrected

To the Editor of Nation's Business:

Editorial page eleven of NATION'S BUSI-NESS for March indicates that you, like many others, use "wholesale prices" in a sense not consistent with modern terminology. Undoubtedly you have in mind basic material prices rather than prices retailers pay to wholesalers for finished products.

At best, there is always a lag in both advance and declines between the prices of raw materials and the consumer price for the finished goods, because changes do not all occur at the same time, and often the retailer does not get notice of a price change until his next purchase.

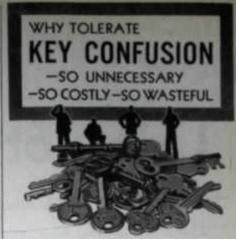
It is possibly true that on this latter basis many retailers have not lowered their selling prices immediately following reductions in wholesale prices, but the same thing was true in 1918 and 1919, when many retailers sold goods on hand at less than replacement cost.

The real point, however, is that there is little relationship between raw material declines and retail prices, because few manufacturers are prone to reduce prices immediately raw material prices are cut.

HERBERT P. SHEETS

Managing Director

The National Retail Hardware Association Indianapolis, Ind.



LEARN ABOUT

TELKEE

the Visible Key-Filing --

Key-FINDING System

Whether a few keys or thousands of keys—TELKEE Devices offer you the perfect system for knowing your keys—knowing where they are when you want to use them. TELKEE tells to whom keys have been loaned and when they should be returned. TELKEE is a simple, effective SYSTEM of positive key control applicable to every class of building and business institution.

WAITE FOR FULL INFORMATION

Thayer TELKEE Corporation

108 East 17th St. :: Los Angeles, California



Through the Editor's Specs

(Continued from page 9)

workman of this painting seize a hammer with the same hand that so firmly grasps this switch. Toiling from dawn to dark he might shape a passable plowshare or automobile fender. It would be wearisome toil. But let him close this switch and power, surging over wires to a hundred factories, leagues away, will call to life machines that will stamp out a fender or forge a plowshare as rapidly as power-operated conveyor belts can bring them the formless metal.

AS I settled back for a hair cut the other day, I asked my barber the ageold question, "How's business?"

He replied:

Not much to complain about. What I need is a small truck.

You see, they are tearing down some government buildings and I figure I can buy enough old iron sheeting for \$10 to build me a double garage. I am going to advertise for a truck to use between five o'clock in the afternoon and the next morning. I'll buy that stuff, haul it out to my place and get the truck back in the morning.

My place is out in Virginia-prettiest place you ever saw. Got just an acre-a square acre-just as square as a city block. Got a six-room house and two chicken houses. Now I want a double garage. I'll put my gas engine in one side of it. I use my gas engine to saw up wood. I pick up the wood all around out there.

I wish you could see my Rhode Island Reds. I have all the eggs I can use and all the chickens we need for the table. I've got two 500-egg incubators but I'm not fixed to use them yet. One of these days, though, I'll be selling eggs and chickens too,

That place of mine's a dandy. Wish you could see the Easter lilies-apple blossoms too, and I've got pear trees on it.

Want to know how I picked it up? I was looking for a place and one day my wife phoned me and told me that she saw in the paper that this place was going to be sold at auction. I hopped in my car that night and took a look at it and the next day I bought it for \$2,500. Got a thousand dollars paid on it now. Don't have to pay any rent and get nearly everything I want to eat right off the place. Say, what do you think? The fellow right across from me holds his place at \$4,500 and his acre is not square and I've done a lot of work on mine too.

As I was leaving the shop, my barber continued, "That country place of mine is only two squares from the traction line and four squares from the bus line.

So this is America!

RECENTLY, in New Orleans, I took a trip along the wharves. Foreign trade is



"A steam trap good enough to stand a fire is good enough to standardize on ? An Arm-

verted-bucket steam trap that had gone through a paper mill fire was salvaged by another user of steam equipment. After putting in a new gasket, the trap worked and still continues to work perfectly.

The above case, and other thousands of installations where Armstrongs have operated efficiently for years without attention, show why executives in practically all steam-using industries say: "this is the trap to standardize on."One of the more recent converts to Armstrong traps is an Eastern railroad system, which standardized on this trap after extensive tests on all makes. A number of companies have over a thousand Armstrongs in service. There are more of them in use than any other mechanically operated trap.

Cost records of a large soap manufacturer give the Armstrong the lowest maintenance cost per trap annually of any trap installed in their works. Likewise maintenance records kept by one of the largest industrial plants justified replacing all other makes of steam traps with Armstrongs. Decreased maintenance cost paid for the Armstrongs in less than three years; after that time they returned a very handsome profit on the investment.

You probably have some Armstrongs in use already. If not, we will gladly send you as many as desired for 90 days' free trial, also an interesting booklet on the principles and economies of steam trapping.

Machine Armstrong

802 Maple Street

Three Rivers, Michigan DISTRICT REPRESENTATIVES AND STOCKS IN ALL PRINCIPAL CITIES

When writing to Armstrong Macuthe Works please mention Nation's Business

You may take it off, Sir; we know you.

We'll admit that dour mask of yours has given a lot of us quite a scare! But at last we're beginning to recognize the really genial old gentleman back of it.

Now the point is, are we going to let you wear that frozen face every ten years or so?

Or are we going to do something about it?

We can, for example, endeavor to control the delicate interplay between production and consumption. Or we can let matters take their own sweet course.

We can try to keep our reserves of supply materials down to fighting trim. Or we can pile up huge and wasteful stocks each in our own little storerooms.

We can put the burdens of car-

rying our supply materials (or marketing our finished products) on the efficient shoulders of the scientific distributor. Or we can all duplicate each other's facilities, use small-scale, expensive methods -and continue to pay the bill.

We can watch out for the germ of overproduction before it becomes malignant - because that particular germ makes itself immediately evident to the distributor, with his fingertips always directly on the pulse of Demand. Or we can continue blissfully to ignore the early stages of the disease.

It's all a matter of the gap between production and consumption. And it is the size of this gap which makes our Uncle Sam sour-or smiling!

Alert students of the far-reaching interrelation between the two great forces of business life-Production and Consumption -are coming to attach more and more importance to the vital connecting link between the two-Distribution. As the nation's foremost distributor of electrical products, Graybar functions to achieve and

maintain economic stability along truly scientific lines.



a continuous lesson to me. And tuition is free. The spectacle of the coming and going of ships, the loading and unloading of cargoes, the bustle of cranes and handling gear still remains a colorful one after all these years.

There were stirring scenes in New Orleans that morning. It gave me a new appreciation of commerce. The wants and the ways of strange lands and stranger peoples. The romantic sea tales of Conrad and McFee became as plausible as a bale of fur pelts. Adventure is in the very air of the docks. You can even smell it. I sniffed the rich odor of spices and other odors from the shadowy recesses of warehouses which had a perfume of their own.

In all those prosaic bags, bales, cans, casks and crates there was an object lesson in economic geography. They give the pattern and substance to our daily life vegetable oils from the East Indies, sponges from the Caribbean, bristles from the Far East, silk from China and Japan, wool from Australia, linen from Ireland, Canada, Belgium. . . .

And for my table, coffee from Brazil, tea from the Orient, cocoa from the tropics, sugar from Cuba and the Philippines, bananas from Central America, figs from Turkey, currants from Greece . . . and so on and so on, a veritable travelog done up in foreign labels.

Once we expose our senses to the compelling sights and sounds of a lively waterfront we begin to get the infinite variety of things to be exchanged for other things, we begin to feel a kinship with business throughout the world, whether it be with the producers of cork in Spain, asphalt in Trinidad, asbestos in Canada, shellac in India, tin from the Malay Peninsula, rubber in the East Indies, or pineapples in Hawaii.

Looking at the docks and the ships I am reminded that we have said in effect to our foreign traders, "Go and search the world for the things which will increase our standard of living." That they have accepted the mandate with persistent enthusiasm is readily revealed by the useful evidence at our piers-"where commerce has enriched the busy coast," as Cowper puts it.

A MAGAZINE editor plans a menu for his particular group. He decides on subjects, and chooses men who know and can write.

How does the editor know what subjects are uppermost in the minds of his readers? There are many "straws in the wind." First, his daily contacts with callers, and his frequent swings around the circle, meeting leaders of thought

DISTRIBUTORS OF 60,000 ELECTRICAL ITEMS THROUGH 77 DISTRIBUTING HOUSES

and action. Then his reading which must be not only specialized but general —other magazines, books, technical journals, the daily press.

Letters furnish excellent information as to what readers are thinking about—and how. The editor of NATION'S BUSINESS receives some 2,000 letters each month. In them are comments on articles and editorials, suggestions for treatment of other subjects—commendation and damnation, agreement and disagreement—all welcome and eagerly read, and added to other material which makes for an editor's sixth sense.

Another measure, and a fairly accurate one of the timely interest of an editorial program is found in the daily newspaper. Newspaper editors look for material which will interest their readers. During 1930 one clipping service collected several thousand reprints from NATION'S BUSINESS in the newspapers, and 2340 editorials in the daily press commenting on material which had appeared in this magazine. Still another "straw" of specific interest is found in readers' requests for reprints of articles—more than 200,000 in 1930.

RECENTLY NATION'S BUSINESS called attention to a retail price controversy between a retail establishment and the W. A. Sheaffer Pen Company. In conclusion we said "Let's hope the remedy is not more laws."

C. R. Sheaffer, treasurer, writes frankly to tell us that we err in our attitude toward what he believes would be a remedy for the situation-the Capper-Kelly bill. "NATION'S BUSINESS," writes Mr. Sheaffer, "should get right on this point-namely, that the Capper-Kelly bill is intended to eliminate an incongruous restriction on the manufacturer operating in open competition. It is not a restrictive act in any sense of the word, but legalizes a contract between manufacturer and retailer which should never have been made illegal. The bill does not force a manufacturer to operate on a price maintenance basis. It gives rights to those manufacturers who must require retailers to operate at a profit."

The writer points out that in the case of his pens, the retail price in effect includes servicing charges for the future. Price cutting may increase the sale of pens, but it also tends to foist the servicing off onto dealers doing business at regular prices.

Meanwhile, the Capper-Kelly bill has passed the House, in emasculated form, and Congress has gone home.

This is No. 3 of a series of advertisements setting forth things to look for when considering partitions.

COMPLETE SERVICE

QUICK DELIVERY

LOW PRICES

These and other advantages are YOURS when dealing with the largest manufacturer of partitions

HAUSERMAN Service is as distinctly superior as Hauserman Partitions. Every detail is attended to by full-time Hauserman Engineers. Only Hauserman gives Hauserman service...

Hauserman Planning Specialists,

PLANNING

with years of experience in subdividing space, consult with you and

study your needs. They offer you

Washington, D. C.

blue-print suggestions for the most efficient and most economical use of your space . . . Hauserman factorydirected erection crews



MANUFACTURING



Hauserman Movable Steel Partitions meet every office or industrial requirement. They afford the ideal method of subdividing space.

install the partitions. Erection by experts saves time, assures better results. Rearrangements, too, are handled by skilled erectors.

Thirteen years' experience in the manufacture of partitions and a



ERECTING

large volume of standardized pro-

duction (1100 linear feet of partitions a day) enables Hauserman to give quick delivery . . . highest quality . . . and new low prices!

THE E. F. HAUSERMAN COMPANY

A nation-wide organization of Partition Specialists

6846 GRANT AVENUE CLEVELAND, OHIO

Factory Directed Planning and Erection Service from these 13 Factory Branches
Newark Philadelphia Buffalo Boston Kansas City
Chicago Pittsburgh Detroit Cincinnati St. Louis

New York

HAUSERMAN MOVABLE

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THIS is one of a series of editorials written by leading advertising men on the general subject of advertising

Prosperity Is Fashionable in America

TODAY'S Buy-Now-and-Help-Prosperity campaigns have one very definite effect on me: I'm immediately reminded of reasons for holding on to my money.

The logic behind this reaction is threefold: such attempts to stimulate business violate the basic principles of good advertising; they indicate a lack of understanding of human nature; they serve only to emphasize unsatisfactory business conditions.

Advertising is a vital force. It must be understood and applied with a cool head, no matter what the pressure. No product, no idea—not even the prosperity theme—can be crammed down the throat of an unprepared or an unwilling public.

Intelligent advertising turns a dramatic spotlight on those factors, backed by logic and balanced by sense, that should cause people to buy. The public quickly detects hesitation, constraint or insincerity in the movement of that spotlight. True, its candle-power must be high, but the subject of that illumination must be clean-cut and clear.

That American business is sound is an accepted fact. Restatement weakens it, and the public should not be asked to study statistics to prove it. Acting normally, manufacturers will give conservative publicity to their successes and keep their troubles to themselves.

Last year it was fashionable to be unprosperous. Any state of mind is contagious—even normalcy. Actually, prosperity is fashionable in America. And we will revert once more to the styles of 1928 and the period before, if leaders set the example.

But, Buy-Now-and-Help-Prosperity won't do the job. Such a slogan . . . carrying the inference that prosperity needs help—insults our good sense, and gets us nowhere.

JOSEPH HENRY O'NEIL Claude Neon Lights, Inc. New York City

KITCHEN CABINETS **OUTDOOR SIGNS** REFRIGERATORS RADIO CABINETS Make it TRUNKS-TOYS TRUCK BODIES out of PRESDWOOD INCUBATORS FURNITURE this all-purpose wood board can serve you in endless ways Seemingly, there's no end to Presdwood's uses. Manufacturers, builders, home owners, home mechanics continually are discovering new things for Presdwood to do-and, without fail, Presdwood does them well. On this page are shown a few of its uses. The makers of these articles say this grainless, all-purpose wood board has improved their products and, besides, has reduced costs. Presdwood works perfectly-under saw, drill or punch. Will not crack, chip, split, splinter or warp. In homes, Presdwood turns waste attic and basement space into useful rooms; aids the handy-man with his jobs. As a lining for concrete forms, Presdwood helps produce better concrete. For summer cottages, summer parks, etc., Presdwood can serve in many ways. Write for free Presdwood booklet. Lists 80 uses and best ways to apply finishes. Your architect, contractor or lumber dealer also will tell you about Presdwood. a sonite "Made in Mississippi Masonite Corporation, Dept. P-5 111 W. Washington St., Chicago, III. Please and your five illustrated bool Masonite Presdwood and its many uses. Masonite Structural Insulation Send for keeps homes cool in summer oaklet that describes Free Booklet Bars heat; brings doughtful comfort at small cost. Keeps out chill, dampness and winter's cold. Reduces fuel bills. Deadens cound. Mascaite Structural Involution built into walls, roofs and flaces is a wise investment. Makes boxes more salable; perpetuates their value. The companion product, Mascaite Invaliding Lath, is a perfect plaster base. Clerck coupon for Mascaite booklet. Mail the coupon today. Name. It will bring you the Street. interesting story of City. Il interested to Manualte Insulat State. Presdwood beck here

What can the AUTOGIRO do?



(Reprinted from Washington News, Sept. 26th, 1930)

HOW A FLIGHT IN THE FAMOUS AUTOGIRO FEELS

Ernie Pyle-Aviation Editor

We flew from Washington-Hoover Airport. Ray put on his brakes, threw in the clutch, revved up the motor, and the big puddles started whirling. In a few seconds they were going around so rapidly you could hardly see them, much swifter than I had always thought.

Then he released the brakes, the plane ran a few feet, and was off the ground. The sensation of climbing in the Autogiro is much the same as in a regular airplane, except that you are getting altitude fast without realizing it. Sort of like a zoom.

We made one climbing turn around the airport, hardly outside the boundaries of the field, and were over a thousand feet high. On up we went to 2000, with the air speed way down to what would have been the stalling point in any other plane.

There was very little wind. Jim headed into what breeze there was, throttled the motor down to about 900 revs, and there we sat, half a mile above the airport. I guess we were going forward slowly, and f am sure we were settling downward, but our height was such that there was no sensation of motion whatever. We seemed suspended there.

Then we made some turns. The Autogiro's stub wing is turned up at the end, to keep it from skidding on the turns. It seemed that Jim was sticking that wingtip into some definite but invisible hole in the air, and that we were slowly turning around it.

Finally we started our glide into the field. I guess they will have to coin a new word for the Autogiro's glide, for it certainly isn't that. Settle is the better word.

Then a few feet from the earth he throttled down, yanked the stick clear back, and we settled to the earth with hardly a bump at all. We rolled a few feet and stopped.

We made two flights in the Autogiro, and were up about 20 minutes. When I climbed out, Earl Steinhauer said: "That's the kind of a plane for you and me, Ernie, one that comes straight down and slow." That expresses the whole thing. It's a great piece of machinery.



AN AUTOGIRO can fly well over 100 miles per hour but, unlike any other heavier-than-air craft, it does not depend upon speed for security.

It sustains itself at unheard of *low* speeds, it can even stop all forward speed and hover momentarily in the air or descend vertically, more slowly than a man in a parachute.

With a dead engine, it can glide to a landing, or descend vertically and gently to a selected spot beneath it.

It can take off with almost no run on the ground and at very low speed; can climb at an angle steeper than any airplane... It can bank and turn slowly without fear of loss of forward speed... It cannot fall off into a spin from a stall... It can land in almost any clear open space... Any experienced pilot can fly it with but a few minutes of ground instruction.

Thomas Carroll, in the December 1930 Aero Digest, estimates that personal security in the Autogiro is governed 90% by the inherent stability of the machine and only 10% by piloting skill
—this as opposed to 90% skill and 10%
inherent stability in the conventional
airplane. Mr. Carroll is one of this
country's best known test pilots and
was for ten years with the National
Advisory Committee for Aeronautics.

We are confident that the Autogiro points toward the possibility that the average person can consider the operation of an aircraft with assurance comparable to that experienced with the automobile.

The Autogiro Company of America is not a manufacturing or selling company. It is solely an engineering and licensing organization. It owns and controls, exclusively, all Autogiro patent rights in the United States. Manufacturing companies of high standing will be licensed to build Autogiros with the full cooperation of our engineering staff.

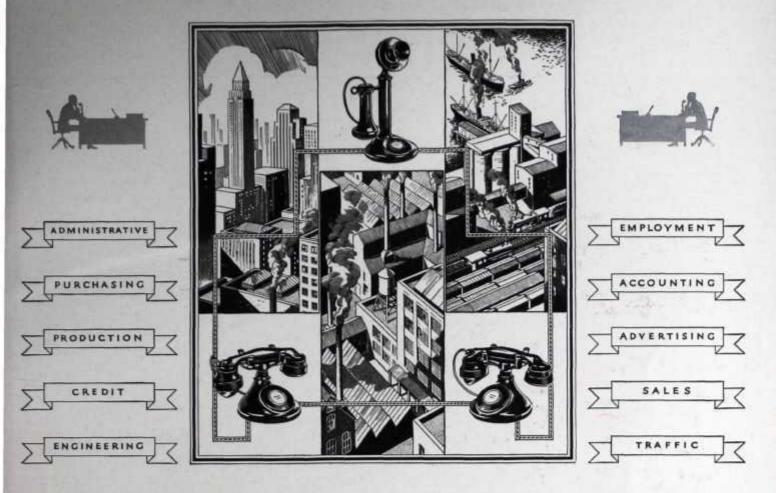
Present licensees are:

Buhl Aircraft Company, Detroit, Mich. Kellett Aircraft Corp., Philadelphia, Pa. Pitcairn Aircraft, Inc., Willow Grove, Pa.



EVERY DEPARTMENT CAN CUT COSTS

... speed business ... by using Long Distance



TELEPHONING between cities is so quick, easy and inexpensive that there is practically no limit to the number or scope of things it accomplishes effectively.

The production manager of a factory equipment company keeps in constant touch with its construction crews which are at work in industrial plants throughout the country. A large automobile corporation makes hundreds of calls each month, divided as follows: sales department, 34%; production department, 46%; service department, 13%; other purposes, 7%.

The engineering department of a large corporation needed ten draftsmen immediately. The employment manager called a city in another state and concluded all arrangements in a few minutes. The men reported

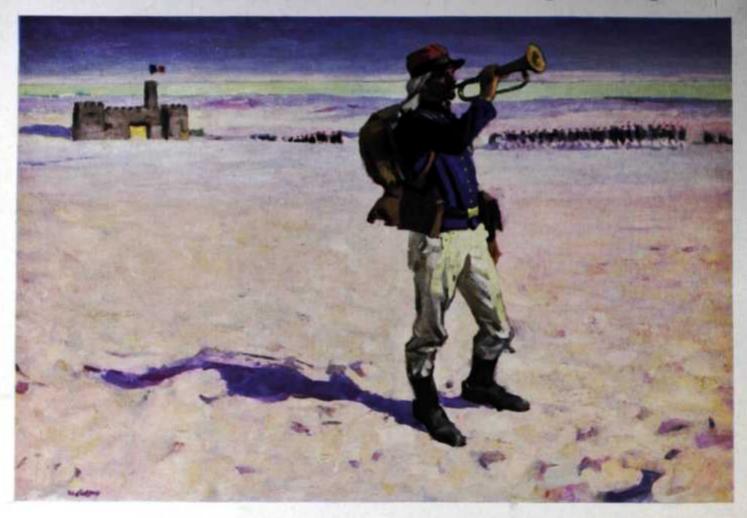
for work the next day. The credit manager of a lumber firm finds inter-city service a direct solution to his credit problem. Telephone calls invariably get attention on overdue accounts. The traffic manager of a chain store organization uses the telephone extensively in tracing freight shipments.

In sales and purchasing . . . in administrative matters . . . in getting information or giving it . . . in adjusting misunderstandings . . . in maintaining important contacts . . . the telephone is an invaluable aid to every department of a business. Rates are low: Baltimore to New York, 90c. Atlanta to Memphis, \$1.65. Detroit to Chicago, \$1.15. Evening and night rates are still lower. To reach an-

other city . . . reach for your telephone.



"I've marched with the Foreign Legion



Yet you sign for me at your country club"

What do the grim watchdogs of the desert know of luxuries? Well, try to take their Chesterfields away from them! Over there—and here too—a good cigarette means good tobaccos. What you taste in Chesterfield cigarettes is milder and better tobaccos-nothing else-blended and "cross-blended" to produce a satisfying fragrance, a flavor which is Chesterfield's alone!

> Chesterfiel Greater mildness